



Columbia University  
Bulletin of Information

BARNARD COLLEGE

ANNOUNCEMENT

1929—1930





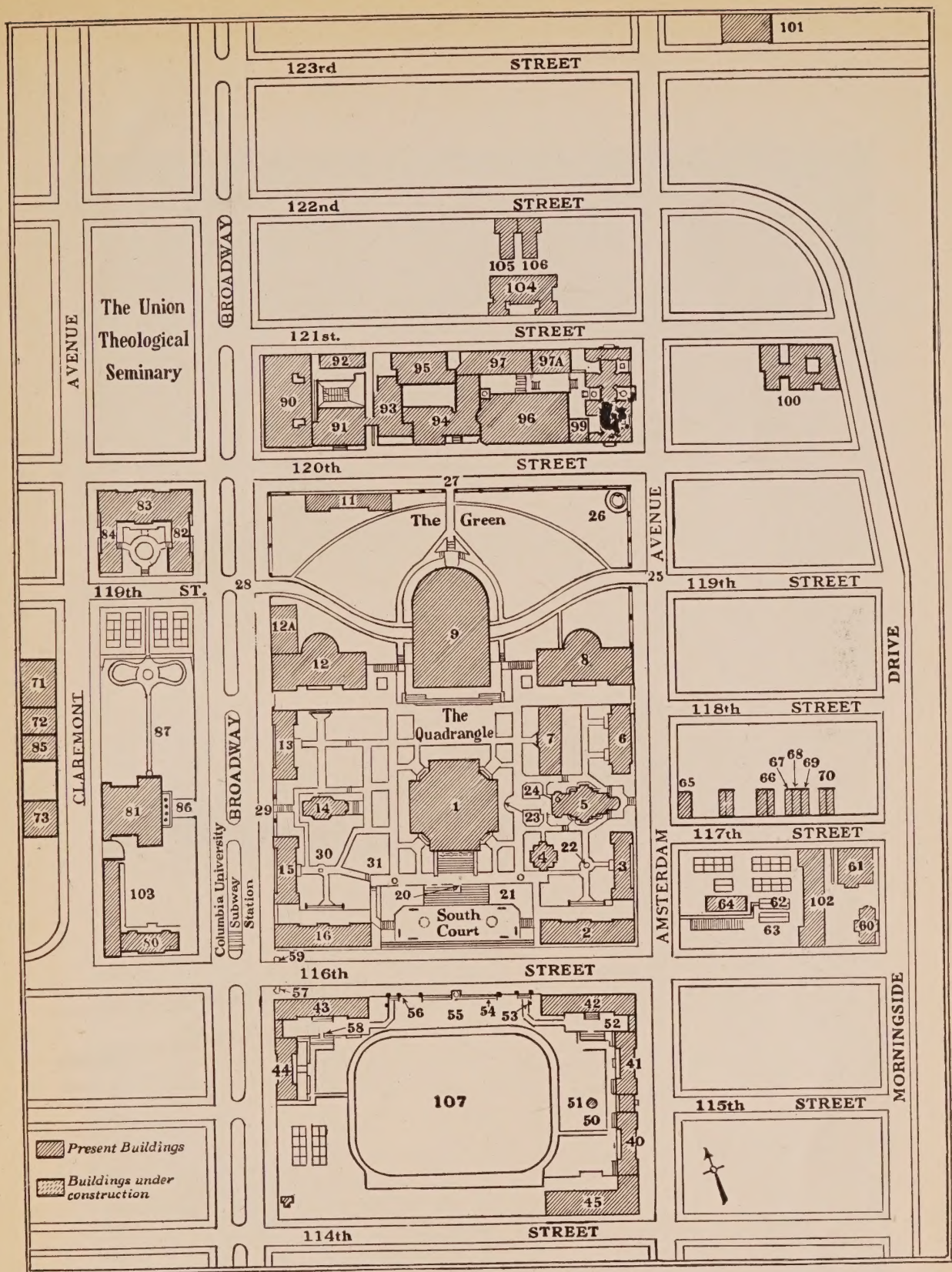








# PLAN OF BUILDINGS AND GROUNDS



## QUADRANGLE

1. Library
2. Kent
3. Philosophy
4. East
5. St. Paul's Chapel
6. Fayerweather
7. Avery
8. Schermerhorn
9. University
11. Physics
12. Havemeyer
- 12a. Chandler Laboratories
13. Engineering
14. Earl
15. Mines
16. School of Business
20. Statue of Alma Mater
21. Class of 1881 Flag Staff
22. Class of 1887 Well Head
23. Class of 1886 Exedra
24. Class of '03 Chapel Bell
25. Class of 1888 Gate
26. Statue of Great God Pan
27. Class of 1882 Gates

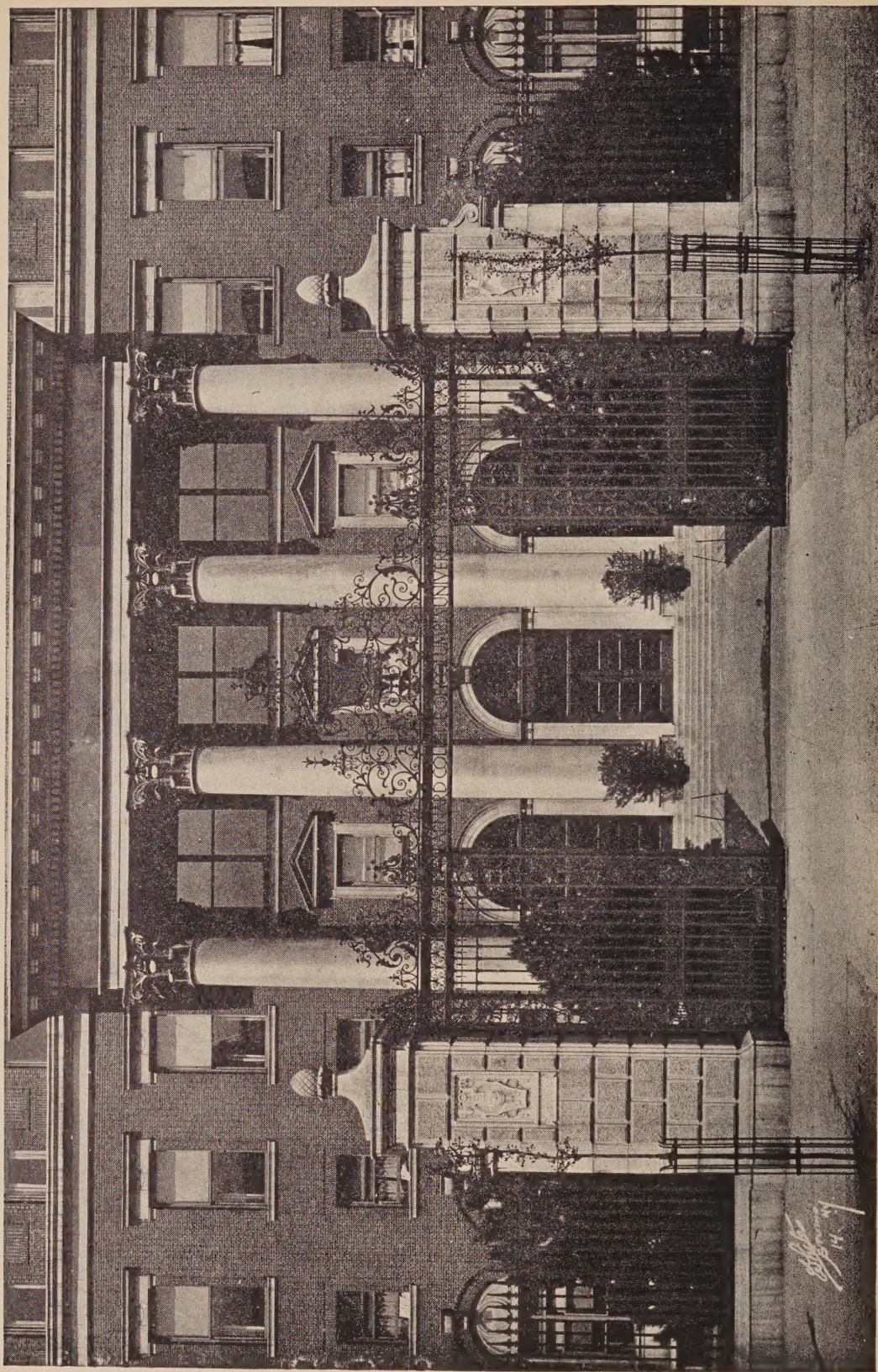
28. Mapes Gates
  29. Class of 1891 Gate
  30. Meunier's Hammerman 1889 Mines Class Gift
  31. Lafayette Post Flag Pole
- ## SOUTH FIELD
40. Livingston
  41. Hartley
  42. Hamilton
  43. Journalism
  44. Furnald
  45. John Jay
  50. 1906 Clock
  51. VanAmringe Memorial
  52. Hamilton Statue
  53. Mitchel Memorial
  54. Rives Memorial Steps
  55. Class of 1885 Sun Dial
  56. Classes of 1884 and 1899 Tablet
  57. Class of 1890 Pylon
  58. Jefferson Statue
  59. Class of 1900 Pylon
  107. South Field

## EAST FIELD

60. President's House
  61. Faculty House
  62. Botany Greenhouse
  63. Agricultural Greenhouse
  64. Crocker Institute
  65. Casa Italiana
  66. Home Study
  67. Dean Hawkes
  68. Chaplain Knox
  69. Maison Française
  70. Carnegie Endowment
  102. Johnson Hall
- ## CLAREMONT AVENUE
71. DeWitt Clinton
  72. Morris
  73. Tompkins
  85. Charles King
- ## BARNARD COLLEGE
80. Brooks
  81. Barnard
  82. Brinckerhoff
  83. Milbank

84. Fiske
  86. Helen Hartley Jenkins Geer Memorial Gate
  87. Milbank Quadrangle
  103. Hewitt
- ## TEACHERS COLLEGE
90. Horace Mann School
  91. Thompson Hall
  92. Annex
  93. Milbank Chapel
  94. Main Teachers College Hall
  95. Macy Hall
  96. Russell Hall
  97. Grace Dodge Hall
  98. Whittier
  99. Lowell Annex
  100. Seth Low
  101. Lincoln School and Research Building
  104. Bancroft
  105. Grant
  106. Sarasota





BARNARD HALL, BARNARD COLLEGE





# Columbia University Bulletin of Information

## BARNARD COLLEGE

ANNOUNCEMENT

1929 – 1930

1929



### FORM OF BEQUEST

To Barnard College I give and bequeath the sum of \$                      for  
the uses and purposes of said Corporation.



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LUCIA S. FISHER, A.B. . . . .	<i>Assistant in Chemistry</i>
AGNES TOWNSEND, A.M. . . . .	<i>Assistant in Physics</i>
LOIS E. TEWINKEL, A.B. . . . .	<i>Assistant in Zoölogy</i>
SABRA J. HOOK, A.B. . . . .	<i>Assistant in Zoölogy</i>
ELEANOR MASON, A.B. . . . .	<i>Assistant in Botany</i>
DOROTHY HAMMOND, A.B. . . . .	<i>Assistant in Botany</i>
JOHN P. SEWARD, A.M. . . . .	<i>Assistant in Psychology</i>
HELEN PALLISTER . . . . .	<i>Assistant in Psychology</i>
F. RONALD MANSBRIDGE, A.B. (Cantab.) . . . . .	<i>Assistant in English</i>
	<i>Assistant in Economics</i>
CHARLOTTE WILD, A.B. . . . .	<i>Assistant in Zoölogy</i>
MARIAN H. CHURCHILL . . . . .	<i>Assistant in Government</i>

Other Officers of the University Who Give Instruction in Barnard College

CLARENCE H. YOUNG, Ph.D. . . . .	<i>Professor of Greek Archaeology</i>
WENDELL T. BUSH, Ph.D. . . . .	<i>Associate Professor of Philosophy</i>
DINO BIGONGIARI, A.B. . . . .	<i>Professor of Italian</i>
J. D. YOUNG, M.F.A. . . . .	<i>Assistant Professor of Fine Arts</i>
EMERSON H. SWIFT, Ph.D. . . . .	<i>Associate Professor of Fine Arts</i>
HORACE L. FRIESS, Ph.D. . . . .	<i>Assistant Professor of Philosophy</i>
LOUIS HERBERT GRAY, Ph.D. . . . .	<i>Professor of Oriental Languages</i>
H. THEODERIC WESTBROOK, A.M. . . . .	<i>Instructor in Greek and Latin</i>

## Barnard Representatives on the University Council

The DEAN (*ex-officio*), Professor BALDWIN (serving until June, 1929), and Professor MALTBY (serving until June, 1930).

## Barnard Representatives on the University Committee on Admissions

Professor JONES, *chairman*, and the DEAN (*ex-officio*).

MEMBERS OF BARNARD SUB-COMMITTEE: Professors BRAUN, HUTTMAN, and LATHAM.

## Standing Committees of the Faculty

Committee on Instruction: The DEAN, *chairman*, Professors ~~REIMER~~, VAN HOOK, ~~HIRST~~, ~~MULLER~~, GREGORY, HUTCHINSON, ~~MULLINS~~, and MACIVER. *Rice*

Committee on Scholarships: The DEAN, *chairman*, Professors HIRST, BAKER, RICE, and MISS WEEKS. *Parkhurst, Fairchild, Sinnott, Baker*

Committee on Honors: The DEAN, *chairman*, Professors ~~LOISEAUX~~, HOWARD, HUTCHINSON, MACIVER, and SINNOTT. *Le Duc*

Committee on Student Affairs: The DEAN, *chairman*, Professors BRAUN, OGILVIE, and MOLEY, MISSES WEEKS and STURTEVANT. *Shaw*

Committee on Students' Programs: Professor GREGORY, *chairman*, Professors PUCKETT, RICE, GATES, REICHARD, CAREY, and GREET, DR. WARE, MISS GOODALE, MR. PEARDON, — — —, and the DEAN (*ex-officio*).

Committee on Schedule of Hours: Professor GREGORY, *chairman*, Professors MULLINS and LOWTHER, and the DEAN (*ex-officio*).

Committee on Transfers: Professor LOWTHER, *chairman*, Professors KELLER, ~~LE DUC~~, and PARKHURST, and the DEAN (*ex-officio*). *Paul Smith*

Committee on Women University Undergraduates: The DEAN, *chairman*, Professors LANGFORD, LE DUC and LATHAM, the DIRECTOR OF UNIVERSITY EXTENSION and the DIRECTOR OF THE UNIVERSITY COMMITTEE ON ADMISSIONS (*ex-officiis*).

## Officers of Administration

EMILY G. LAMBERT, A.B. . . . .	Bursar
ANNA E. H. MEYER, A.B. . . . .	Registrar
KATHARINE S. DOTY, A.M. . . . .	Assistant to the Dean — Occupation Bureau
MABEL FOOTE WEEKS, A.B. . . . .	Assistant to the Dean — Social Affairs
HELEN P. ABBOTT, A.M. . . . .	Assistant to the Dean — Residence Halls
MARY V. LIBBY, A.B. . . . .	Assistant to the Dean — Admissions, Information
BERTHA L. ROCKWELL . . . . .	Librarian of Barnard College
JOHN J. SWAN, M.E. . . . .	Comptroller of Barnard College
GULIELMA F. ALSOP, M.D. . . . .	College Physician
FREDERICK A. GOETZE, M.Sc. . . . .	Treasurer of the University
REV. RAYMOND C. KNOX, S.T.D. . . . .	Chaplain of the University
WILLIAM H. MCCASTLINE, M.D. . . . .	University Medical Officer



## Barnard College

### GENERAL STATEMENT

**Columbia University.** — Columbia University was founded in 1754 as King's College by royal grant of George II, King of England, 'for the Instruction of youth in the Learned Languages, and the Liberal Arts and Sciences.' The Revolutionary War interrupted its active work, but in 1784 it was reopened as Columbia College. In 1912 the corporate title was changed to Columbia University in the City of New York.

The University at the present time consists of Columbia College, the undergraduate college of liberal arts for men, which offers a program of studies leading to the degree of Bachelor of Arts; the School of Law, with courses leading to the degrees of Bachelor and Master of Laws and Doctor of Law (Doctor Juris); the College of Physicians and Surgeons, with courses leading to the degree of Doctor of Medicine; the Schools of Mines, Engineering, and Chemistry, with courses leading to the several engineering degrees, and the degree of Master of Science; the School of Architecture, with courses leading to the degrees of Bachelor of Architecture and Master of Science; the School of Journalism, with courses leading to the degrees of Bachelor of Literature and Master of Science; the School of Business, with courses leading to the degrees of Bachelor and Master of Science; the School of Dentistry, with courses leading to the degrees of Bachelor of Science and Doctor of Dental Surgery; the School of Library Service offering a one year graduate course leading to a degree of Bachelor of Science, and a second year of advanced graduate study leading to a degree of Master of Science; the non-professional graduate Faculties of Political Science, Philosophy, and Pure Science, with courses leading to the degrees of Master of Arts and Doctor of Philosophy. In addition to these Schools and Faculties, the University includes the independent corporations of Barnard College, the undergraduate college for women, with a course leading to the degree of Bachelor of Arts; Teachers College, including the Faculties of Education and Practical Arts, with courses leading to the degrees of Bachelor of Science, Master of Arts, and Master of Science; and the New York College of Pharmacy, with courses leading to the degrees of Pharmaceutical Chemist, Bachelor of Science, and Doctor of Pharmacy.

The University maintains three sessions during the year: the Winter Session, beginning the last Wednesday of September and ending the first Tuesday of February; the Spring Session, beginning the first Wednesday of February and ending the second Wednesday of June; and the Summer Session of six weeks' duration, beginning immediately after July 4. Through its system of University Extension the opportunity is offered to men and women to pursue subjects

included in a liberal education, and to take courses toward a diploma or an academic degree; Home Study courses are also offered to persons who are unable to take work in residence.

**Founding of Barnard College.** — Barnard is the undergraduate college for women of Columbia University. In 1889 a group of men and women who wished to provide for women in New York City a college education fully equal to that offered to men succeeded in obtaining the sanction of the Trustees of Columbia for the establishment of an affiliated woman's college. A charter was granted by the State of New York, and promises of subscriptions for the support of the college during the first four years of its existence were secured. Because President Frederick A. P. Barnard of Columbia College had for many years been an ardent advocate of the admission of women to Columbia, the founders of the new college gave it his name. With seven instructors selected from the teaching staff of Columbia and with fourteen regular and twenty-two special students, Barnard opened in the fall of 1889 in a rented house at 343 Madison Avenue.

**Relation to the University.** — In 1900 when the growth of the College had made inappropriate the original informal arrangement for instruction, an agreement was made between the Trustees of Columbia College and of Barnard College by which Barnard was incorporated in the educational system of the University. By the provisions of this agreement, the President of the University is *ex-officio* President of Barnard College. Barnard professors are appointed by the University on the nomination of the Dean with the approval of the President and the Trustees, and rank as professors of the University; in exchange for instruction given by them at Columbia, certain Columbia instructors give courses at Barnard. The graduates of Barnard receive their degrees from Columbia, and these degrees are maintained as of equal value with corresponding degrees conferred upon the graduates of Columbia College. The University library is open to women on the same terms as to men. Various opportunities in other schools of the University have also, through the relation of Barnard College to Columbia, been opened to Barnard students who wish to avail themselves of the advantage of professional training. On the other hand, Barnard has its separate corporate and financial organization, with its own Board of Trustees. It retains its own internal administration, conducted by the Dean, who is appointed by the President with the advice and consent of the Trustees of Barnard. Its courses are determined and administered by its own Faculty, consisting of all professors who give instruction at Barnard.

**Buildings and Grounds.** — Since 1897 Barnard has occupied the land on Broadway between 119th and 120th Streets, just west of the main buildings of the University. In 1903 Milbank Quadrangle, extending from 119th to 116th Street, was added through the gift of Mrs. A. A. Anderson. Milbank Hall and Brinckerhoff Hall, erected in 1896, the gifts respectively of Mrs. Anderson and Mrs. Van Wyck Brinckerhoff, and Fiske Hall, erected in 1898, the gift of Mrs. Josiah M. Fiske, are three adjoining buildings on 119th Street; they contain the administrative offices, lecture rooms, and laboratories. Brooks Hall, a dormitory at the southern end of the Quadrangle on 116th Street, was erected in 1907. A new residence hall adjoining Brooks Hall and known as Hewitt Hall was completed in 1925. Barnard Hall, given by Mr. Jacob H. Schiff and erected in 1917, is on Milbank Quadrangle near 117th Street; it contains the



gymnasium, swimming-pool, lunch-room, reading-room, doctor's and nurses' offices, and rooms for student organizations.

**Financial Statement.** — The College owns equipment, buildings, and grounds of an estimated value of over \$3,700,000, and holds productive funds providing a net income of about \$180,000.

**Course of Study.** — Barnard College offers a liberal course of undergraduate instruction for women, of four years' duration, leading to the degree of Bachelor of Arts.

Students who wish two years only of collegiate work, in preparation for professional schools, may enter under the same conditions as those intending to complete the requirements for the Bachelor of Arts degree, and take, during the freshman and sophomore years, a program modified to meet the requirements of the professional school to which the transfer is to be made.

Under certain circumstances, Barnard students in the Bachelor of Arts course may, after three full years of work at Barnard College, receive permission to substitute the first year of an approved professional school for the senior year at college, and still obtain the Bachelor of Arts degree.

**Academic Discipline.** — The admission, continuance upon the rolls, and graduation of any student is subject to the full disciplinary power of the University authorities, as prescribed by the statutes of the University.

The College makes all possible provision for safeguarding the health of its students and it reserves the right to require the withdrawal of any student whose health, in the opinion of the College Physician, does not warrant her continuing her college course.

**Residence.** — All students not residing with their parents are required to live in Brooks Hall or Hewitt Hall unless for reasons of weight they receive special permission to live with relatives. Applications for such permission, accompanied by letters of approval from parents or guardians, should be made before August 1 to the Assistant to the Dean in charge of Social Affairs. Reservations for rooms outside, made without permission, will not be approved.

## ADMISSION

**To Columbia University in General.** — A student accepted and registered by the proper authorities as having fulfilled the preliminary qualifications for candidacy for a degree, certificate of proficiency, or diploma, is enrolled as a matriculated student of the University. A period of regular attendance upon all stated academic exercises amounting to at least one academic year must be completed by every candidate for a degree.

Students prevented by conscientious scruples from complying with academic requirements which may be fulfilled only upon days set apart by their church for religious observance, should make application to the appropriate authority for equitable relief.

A student not enrolled as a matriculated student may enter the University as a non-matriculated student, permitted to attend such courses of instruction as he or she may be qualified to take, but is not a candidate for a degree, certificate of proficiency, or diploma. Such students are expected to conform to the

same standards of attendance and scholarship as are required of matriculated students. Non-matriculated students may receive a formal statement of the satisfactory completion of any course. (See p. 31.)

Admission to the several schools and colleges of Columbia University presupposes certain educational qualifications, but the possession of these qualifications does not entitle a candidate to admission unless his or her character and personality are acceptable to the University and unless he or she is physically fit to do the work which he or she desires to undertake. Satisfaction of the minimum requirements for admission to a school does not insure admission, particularly if the school be crowded.

**To Barnard College in Particular.** — Admission as a matriculated student to Barnard College is obtained by examination, or by psychological test, except that in suitable cases the certified credentials of degree-granting institutions may be accepted for the subjects or parts of subjects which they cover.

Except for reasons of weight, candidates for admission to the freshman class must be at least fifteen years of age at the time of matriculation; candidates for admission to advanced standing must be correspondingly older. Every candidate must, before admission, present a certificate of good moral character from her last teacher, or from some properly qualified citizen. Students from other colleges or universities must present certificates of honorable dismissal.

Information regarding admission may be obtained in person, or by mail, or telephone from the Secretary to the Committee on Admissions of Barnard College.

**Preliminary Application for Admission.** — Each student who plans to enter the College should file a preliminary application for admission with the Secretary to the Committee on Admissions at as early a date as possible. Other things being equal, early applications will receive the preference.

## ADMISSION TO THE FRESHMAN CLASS

### Subjects Required for Admission

The requirement for admission to the freshman class is proficiency in fifteen units of secondary school subjects, of which some are prescribed and the remainder elective, as specified below. The unit ordinarily implies the study of a subject for a time equivalent to five periods a week for one year.

	COUNTING IN UNITS
Candidates must offer:	
<sup>1</sup> English, elementary (page 35) . . . . .	3
Mathematics, elementary (page 44) . . . . .	3
Foreign languages, of which at least 3 must be in one language . .	5
Elective subjects to be selected from those accepted for admission, as listed below. . . . .	4
	<hr/> 15

<sup>1</sup> The ordinary four-year secondary school course in English counts as three units.



Elective Subjects

Candidates may offer any of the following subjects, not included among their prescribed subjects, without other restrictions than that to offer an intermediate or advanced subject will involve offering, either at the same time or earlier, the corresponding elementary subject:

	COUNTING IN UNITS
Biology (Advanced) (page 32) . . . . .	1
Botany (page 33) . . . . .	1
Chemistry (page 33) . . . . .	1
Drawing (page 34) . . . . .	1
French, elementary (page 37) . . . . .	2
French, intermediate (page 38) . . . . .	1
French, advanced (page 38) . . . . .	1
German, elementary (page 39) . . . . .	2
German, intermediate (page 40) . . . . .	1
German, advanced (page 40) . . . . .	1
Greek, elementary (page 41) . . . . .	2 or 3
History, elementary (page 42) . . . . .	1, 2, 3, or 4
Italian, elementary (page 42) . . . . .	2
Italian, intermediate (page 43) . . . . .	2 or 3
Latin, elementary (page 43) . . . . .	1
Mathematics, advanced (College) (page 45) . . . . .	$\frac{1}{2}$ , 1, or $1\frac{1}{2}$
<sup>1</sup> Musical Appreciation or Harmony (page 45) . . . . .	1
Physics (page 46) . . . . .	1
Physiography (page 46) . . . . .	1
Spanish, elementary (page 47) . . . . .	2
Spanish, intermediate (page 47) . . . . .	1
Spanish, advanced (page 48) . . . . .	1
Zoölogy (page 48) . . . . .	1

<sup>2</sup> Plans of Admission

Three plans of admission are open to properly qualified candidates for admission to Barnard College. The first employs a psychological examination; the second employs examinations in all 15 of the units offered; and the third, four comprehensive examinations. In all plans it is necessary to submit a record of preparatory work. Blanks for this record may be obtained from the Secretary to the Committee on Admissions.

<sup>1</sup> An examination in this subject will be given in September, but not in June.  
<sup>2</sup> Candidates who find that examinations are fixed for days set apart for religious purposes by the church to which they belong, and who are prevented by conscientious scruples from attending such examinations, are requested to make application to the Committee on Admissions through the Registrar of Barnard College for equitable relief. It should be noted, however, that in case alternative opportunities for taking a given examination are statedly offered, as for instance the June and September entrance examinations, such students are expected to present themselves on the day which is not set apart as a holy day.

### I. Psychological Test

A candidate may not enter by this plan if she has failed her entrance examinations to any college.

By this plan, a candidate's qualifications for admission will be based upon the following four considerations:

#### A. *School Record.*

In considering this, the standing of the school, the excellence of the candidate's work, and the subjects studied will be vital. She must have completed in an acceptable secondary school a course extending over at least four years, and covering the subjects required for admission. (See page 17.)

The candidate must have been graduated and must be recommended by her principal or headmistress. In schools in New York State in which Regents' examinations are given, the candidate must have passed the Regents' examinations with satisfactory grades.

In determining whether or not a school is satisfactory the procedure to be followed will be this:

Schools within the territory of the New England Certificate Board will be acceptable, if on the accepted list of that board.

Similarly, schools within the territory of the Association of Colleges and Secondary Schools of the Southern States or of the North Central Association of Colleges and Secondary Schools will be regarded as acceptable, if on the approved list of either of these associations.

Schools outside the territory of any of these bodies will be requested to submit the names of leading colleges on whose accepted lists they do appear, and their acceptability will be determined for the time being upon the basis thus furnished.

In case any school recommends students whose records prove to be consistently below the standard, the records of that school will no longer be considered satisfactory.

If a student's work in college should show her deficient in any entrance subject in which she has received credit, her credit in that subject will be cancelled.

#### B. *Character and Promise.*

The candidate's qualities, mental and moral, as shown by her record in and out of school and the recommendations which she can submit will be important factors. Whenever possible, a personal interview will be required. In cases in which this is not possible a photograph must be submitted and the names of at least three responsible citizens must be given as references. *The Committee on Admissions is able to give little if any weight to letters of recommendation from persons outside the school of the candidate, unless asked for by the college.*

#### C. *A Health Record.*

This will include a health history and the results of a health examination. These must be submitted on blanks furnished by the Secretary to the Committee on Admissions and approved by the Barnard College Physician before a student will be permitted to register.



*D. A Psychological Examination.*

This examination is designed to select the students qualified by general ability to profit by a college course. It is not an examination in the subject matter of the secondary school course. It is to test common sense and general fitness for college work rather than preparation in specific subjects.

The examination will be given June 24, 1929, at 9 a.m., for candidates for admission in the following September. It will be given also on September 19 at 9 a.m., and on January 28, 1930, at the same hour. The psychological examination to be given by the College Entrance Examination Board (Scholastic Aptitude Test) will be accepted for admission for candidates approved for admission by this method.

It should be clearly understood that the satisfaction of any one or two of these requirements does not entitle the candidate to admission. Evidence on all of these points is considered by the Committee on Admissions in its selection from among the candidates of those best fitted for a college course.

## II. Examinations in 15 Units

Candidates entering by this plan are required to take the psychological examination for purposes of record only.

By this plan a candidate's qualifications for admission will be based upon the following four considerations:

*A. School Record.*

Evidence of adequate preparation in the subjects required for admission.

*B. Examinations.*

Except for reasons of weight examinations will be credited only if passed within twenty-nine months of the time the candidate expects to begin her college work.

A candidate may not present herself at more than four series of examinations, except by special permission of the Committee on Admissions.

The following examinations in 15 units may be offered in partial fulfillment of the examination requirements for admission:

(i) Those given by the College Entrance Examination Board.<sup>1</sup>

(ii) Those entrance examinations given by Columbia University.

(iii) Examinations given in the high schools by the Education Department of the State of New York (Regents') to students who have satisfactorily completed certain courses in these high schools. In these examinations seventy-five per cent will ordinarily be regarded as the lowest passing mark.

NOTE. — An intermediate or advanced language examination will not give a student credit for the elementary or intermediate work unless a mark of at least 85% is obtained in the Regents' examination.

An intermediate algebra examination will not give a student credit for elementary algebra unless a mark of at least 85% is obtained in the Regents' examination.

To secure credit for drawing three years' work must be taken and Regents'

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<sup>1</sup> The numerical ratings of the Board are accepted by the College. The passing mark, however, is fixed by the Committee on Admissions.

examinations offered in elementary representation and design and intermediate drawing.

Since the Regents' Board no longer gives examinations in advanced botany and advanced zoölogy, all Regents' candidates offering those subjects for admission in September will be required to take the College Board or Columbia examinations in the subjects. Candidates offering those subjects for admission in February require special action.

(iv) With special permission, certificates of entrance examinations taken in good faith for admission to other institutions. Such certificates are accepted only in so far as they cover specifically, and by name, subjects or lettered (or numbered) parts of a subject which are accepted for admission as stated on page 17.

#### *C. Character.*

Evidence of the possession of the qualities of mind and character deemed requisite for the most profitable pursuit of a college course. A personal interview is desired whenever possible. *The Committee on Admissions is able to give little if any weight to letters of recommendation from persons outside the school of the candidate, unless asked for by the college.*

#### *D. A Health Record.*

This will include a health history and the results of a health examination.

This must be submitted on blanks furnished by the Secretary to the Committee on Admissions, and approved by the Barnard College Physician before a student will be permitted to register.

It should be clearly understood that the satisfaction of any one or two of these requirements does not entitle the candidate to admission.

### III. Four Examinations Plan

Candidates entering by this plan are required to take the psychological test for purposes of record only.

By this plan a candidate's qualifications for admission will be based upon the following four considerations:

#### *A. School Record.*

A candidate for admission who has completed with a high degree of proficiency a satisfactory secondary school course may, at the discretion of the Committee on Admissions, receive permission to take the four comprehensive examinations.

#### *B. Examinations.*

She must furnish school reports covering the entire record of subjects and grades for four years previous to college entrance, and a confidential estimate of character, personality, and promise of usefulness from the school principal. These should be sent to the Secretary to the Committee on Admissions, if possible before January 15 of the year in which the examinations are to be taken. The Committee on Admissions must give its permission, based on these reports, before the applicant may take the examinations.



She must take these entrance examinations in not less than four subjects at one and the same series of examinations, the subjects in question to include all those prescribed for admission and the examinations to be the comprehensive examinations. These subjects must be the following, unless for reasons of weight the Committee on Admissions allows substitution for 1 or 3:

1. English.
2. A foreign language.
3. Mathematics, comprehensive or in part, or chemistry or physics.
4. A fourth subject, designated by the applicant from the subjects accepted for entrance. This choice will be subject to the approval of the Committee on Admissions, which may at its discretion substitute another subject.

These four examinations must be taken at one time. Comprehensive examinations (see page 50) are held by the College Entrance Examination Board in June, and by Columbia University in September.

At least two examinations must cover more than two units each.

In each subject chosen for examination, the comprehensive examination covering all the units offered by the candidate for admission must be taken.

A student, if admitted, will be admitted without conditions. If she fails of admission, she will not be considered for admission again under the Four Examinations Plan until after the interval of one academic year. She may, however, present herself at the next series of examinations as a candidate for admission under the plan which offers examinations in all fifteen units. The results of a candidate's examinations will stand to her credit for twenty-nine months.

A candidate who wishes to enter by the Four Examinations Plan may, if she desires, test herself by taking preliminary examinations — not to be credited toward admission — before she presents herself for the four comprehensive examinations which she plans to count.

#### *C. Character.*

Evidence of the possession of the qualities of mind and character deemed requisite for the most profitable pursuit of a college course. A personal interview is desired whenever possible. *The Committee on Admissions is able to give little if any weight to letters of recommendation from persons outside the school of the candidate, unless asked for by the college.*

#### *D. A Health Record.*

This will include a health history and the results of a health examination.

These must be submitted on blanks furnished by the Secretary to the Committee on Admissions, and approved by the Barnard College Physician before a student will be permitted to register.

It should be clearly understood that the satisfaction of any one or two of these requirements does not entitle the candidate to admission.

### Examinations

**Time.** — Examinations for admission to Barnard College are held each year in June and September. In 1929 they will be held June 17–22 and September 16–20, and in 1930, June 16–23.

NOTE. — The regular series of entrance examinations in January has been discontinued. Candidates for admission to Barnard College in February of any year may be given entrance examinations in the preceding January, provided that they present evidence of preparation which makes it reasonably probable that they can pass the examinations for which they wish to apply, and provided further that such examinations would, if passed, complete their requirements for admission.

Place. — In June the entrance examinations will be conducted by the College Entrance Examination Board, of which Columbia University is a member, at Barnard College, and at a large number of widely distributed points. A list of these points will be published by the Board (431 West 117th Street, New York, N. Y.) about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be transmitted to the Secretary of the Board not later than February 1.

In September, 1929, the entrance examinations of Barnard College will be conducted by the Columbia University Committee on Admissions, and will be held only at the College.

Application for Examination. — Every candidate for examination is required to file an application in advance for *each series of examinations* which she wishes to take. For the examinations in June, 1929, the application must be filed with the Secretary of the College Entrance Examination Board, 431 West 117th Street, New York, N. Y.

Applications for examination in the United States east of the Mississippi River or on the Mississippi River, must be filed on or before May 27. Applications for examination elsewhere in the United States or in Canada must be filed on or before May 20, and applications for examination at points outside of the United States and Canada must be filed on or before May 6. Requests for blank forms of application should be addressed to the Secretary of the Board.

When the candidate has failed to obtain the required blank form of application for examination (other than the Scholastic Aptitude Test), the usual examination fee will be accepted, if the fee arrives not later than the specified date accompanied by a memorandum containing the name and address of the candidate, the examination center at which she wishes to present herself, and a list of all the subjects in which she may have occasion to take the Board's examinations.

A candidate for a competitive scholarship to be awarded on the basis of the June examinations must, in her application to the Secretary of the College Entrance Examination Board, mention the scholarship for which she is competing. For the examinations in September, 1929, applications must be filed with the Registrar of Barnard College on or before September 7. Requests for blank forms of application should be addressed to the Secretary to the Committee on Admissions of Barnard College.

*Candidates who wish to use four examinations for admission (see page 21) should, if possible, submit their records to the Secretary to the Committee on Admissions before January 15 of the year in which the examinations are to be taken.*

Examination Fee. — *The fee for each series of examinations is \$10 for the College Entrance Board and \$10 for the Columbia University examinations.*

Every application for examination in June must be accompanied by a fee



of \$10 in the form of a postal order, express order, or draft on New York to the order of the *College Entrance Examination Board* for all candidates. Applications received later than the dates named will be accepted where it is possible to arrange for the examination of the candidates concerned, but only upon the payment of an additional fee of \$5. The Board will not accept belated applications for the Scholastic Aptitude Test.

Examinations will be held in accordance with the Time (Standard or Daylight Saving) observed in the local public schools. Candidates who are to take the Scholastic Aptitude Test should report to the supervisor of examinations on Wednesday, June 19, at 8:45 a. m. No candidate will be admitted to the Scholastic Aptitude Test after 9:00 a. m. At centers where Daylight Saving Time is observed candidates should report at 7:45 a. m., Standard Time, and the test will begin at 8:00 a. m., Standard Time.

Every application for examination in September must be accompanied by a fee of \$10 in the form of a postal order, express order, or draft on New York to the order of *Barnard College*.

If a late application is accepted, a second fee of \$5 must be paid.

The receipt for the examination fee must be carefully preserved by the candidate and shown (not surrendered) to the supervisor in charge of the examinations as evidence of her right to be admitted to the same.

The fee for examination in June cannot be returned unless the request for the cancellation of the application and the return of the fee reaches the Secretary of the Board on or before June 10, 1929. The fee for examination in September cannot be returned unless the request for the cancellation of the application and the return of the fee reaches the Registrar of Barnard College on or before September 12, 1929.

**Comprehensive Examinations.** — The College Entrance Examination Board also holds a set of Comprehensive Examinations designed primarily to meet the needs of candidates wishing to enter by four examinations (see pp. 21, 50). Candidates for admission by examinations in all 15 units may take the comprehensive examination in the whole of any subject offered instead of the "ordinary" examinations in the separate parts of that subject, *e.g.*, English Cp. instead of English 1 and 2.

The applications and examination fees of candidates desiring to take the Board's comprehensive examinations are subject to the same general rules as the applications and fees of other candidates for examination (see page 22).

**Schedule of Examinations.** — Candidates taking the examinations must report to the supervisor, in the examination room, fifteen minutes in advance of the first examination which they are to attend.

## JUNE EXAMINATIONS

June 17-22, 1929

*On Tuesday morning and on every subsequent half-day a candidate will be permitted to remain under examination for four hours, but not longer, if the periods assigned to the examinations that she wishes to take aggregate four hours or more.*

*Monday, June 17*

Mathematics <i>a</i> — Elementary Algebra (3 hours) . . . . .	9:30
Mathematics <i>a i</i> — Algebra to Quadratics (2 hours). . . . .	9:30
Mathematics <i>a ii</i> — Quadratics and beyond (2 hours) . . . . .	9:30
Comprehensive Mathematics Cp. 3 — Elementary (3 hours) . . . . .	9:30
<sup>1</sup> French (3 hours) . . . . .	2:00

*Tuesday, June 18*

English 1-2 (3 hours) . . . . .	9:00
Comprehensive English (3 hours) . . . . .	9:00
Botany (2 hours) . . . . .	2:00
Chemistry (2 hours) . . . . .	2:00
Physical Geography (2 hours) . . . . .	2:00

*Wednesday, June 19*

Scholastic Aptitude Test. . . . .	9:00
Biology (2 hours) . . . . .	2:00
Physics (2 hours) . . . . .	2:00
Zoölogy (2 hours). . . . .	2:00

*Thursday, June 20*

Comprehensive Latin (3 hours). . . . .	9:00
Mathematics <i>b</i> — Advanced Algebra (2 hours) . . . . .	2:00
Mathematics <i>c</i> — Plane Trigonometry (2 hours) . . . . .	2:00

*Friday, June 21*

Mathematics <i>c</i> — Plane Geometry (3 hours) . . . . .	9:00
Mathematics <i>d</i> — Solid Geometry (3 hours) . . . . .	9:00
Mathematics Cp. <i>H</i> — Comprehensive Advanced (3 hours) . . . . .	9:00
<sup>1</sup> German (3 hours) . . . . .	2:00
<sup>2</sup> Italian (3 hours) . . . . .	2:00
<sup>1</sup> Spanish (3 hours) . . . . .	2:00

*Saturday, June 22*

History <i>a</i> — Ancient (2 hours) . . . . .	9:00
History <i>b</i> — European (2 hours) . . . . .	9:00

<sup>1</sup> The comprehensive examinations in French, German, and Spanish will make provision for Cp. 2, Cp. 3, Cp. 4, *a*, *b*, *bc*.

<sup>2</sup> The comprehensive examination in Italian will make provision for Cp. 2, Cp. 3, *a* and *b*.



History <i>c</i> — English (2 hours) . . . . .	9:00
History <i>d</i> — American (2 hours) . . . . .	9:00
Drawing (2 hours) . . . . .	2:00
Greek (3 hours) . . . . .	2:00

*Monday, June 24*

Psychological Examination (Columbia University) . . . . .	9:00-12:30
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## SEPTEMBER EXAMINATIONS

September 16-20, 1929

*Monday, September 16*

English 1 (2 hours) . . . . .	9:00
English 2 (2 hours) . . . . .	9:00
Comprehensive English (3 hours) . . . . .	9:00
<sup>1</sup> French . . . . .	2:00

*Tuesday, September 17*

Latin — Second Year (2 hours) . . . . .	9:00
Latin — Third Year (2 hours) . . . . .	9:00
Latin — Fourth Year (2 hours) . . . . .	9:00
Comprehensive Latin (3 hours) . . . . .	9:00
History <i>a</i> — Ancient (2 hours) . . . . .	2:00
History <i>b</i> — Modern European (2 hours) . . . . .	2:00
History <i>c</i> — English (2 hours) . . . . .	2:00
History <i>d</i> — American and Civil Government (2 hours) . . . . .	2:00

*Wednesday, September 18*

Mathematics <i>a i</i> — Algebra to Quadratics (2 hours) . . . . .	9:00
Mathematics <i>a ii</i> — Quadratics and beyond (2 hours) . . . . .	9:00
Mathematics <i>a</i> — Elementary Algebra, complete (3 hours) . . . . .	9:00
Comprehensive Elementary Mathematics (3 hours) . . . . .	9:00
<sup>1</sup> German (3 hours) . . . . .	2:00
<sup>2</sup> Italian (3 hours) . . . . .	2:00
<sup>1</sup> Spanish (3 hours) . . . . .	2:00

*Thursday, September 19*

<sup>3</sup> Psychological Examination . . . . .	9:00-12:30
Mathematics <i>d</i> — Solid Geometry (2 hours) . . . . .	2:00
Mathematics <i>b</i> — Advanced Algebra (2 hours) . . . . .	2:00
Mathematics <i>e</i> — Plane Trigonometry (2 hours) . . . . .	2:00

<sup>1</sup> The comprehensive examinations in French, German and Spanish will make provision for Cp. 2, Cp. 3, Cp. 4, *a*, *b*, *bc*.

<sup>2</sup> The comprehensive examinations in Italian will make provision for Italian Cp. 2, Cp. 3, *a* and *b*

<sup>3</sup> In January it will be given on the 28th, 9:00-12:30.

# ENTRANCE EXAMINATIONS

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Comprehensive Advanced Mathematics (3 hours) . . . . .	2:00
Greek (3 hours) . . . . .	2:00

## Friday, September 20

Physics (2 hours) . . . . .	9:00
Mathematics <i>c</i> — Plane Geometry (2 hours) . . . . .	9:00
Physiography (2 hours) . . . . .	9:00
Botany (2 hours) . . . . .	2:00
Chemistry (2 hours) . . . . .	2:00
Zoölogy (2 hours) . . . . .	2:00
Drawing (2 hours) . . . . .	2:00
Music <i>a</i> — Musical Appreciation (2 hours) . . . . .	2:00
Music <i>b</i> — Harmony (2 hours) . . . . .	2:00

**Substitutes for the Board or Barnard Examinations.** — Barnard College accepts in lieu of its entrance examinations or those of the College Entrance Examination Board<sup>1</sup> no credentials of any sort except (1) the examination reports of the Education Department of the State of New York, showing that the candidate has completed certain courses in a high school in the State of New York and that she has passed the examinations of the Education Department in these subjects<sup>2</sup> (for table of equivalents, see page 28); (2) with special permission, the official reports of entrance examinations taken in good faith for admission to other colleges; and (3) certain courses of the Summer Session of Columbia University (see page 29). These credentials are accepted only in so far as they cover specifically, and by name, subjects or lettered (or numbered) parts of a subject which are accepted for admission to Barnard College, and state in percentages the grades received in the examinations in such subjects. Candidates must take the regular entrance examinations in the subjects in which their credentials are not deemed adequate. Except for reasons of weight, credentials are not accepted as covering subjects passed more than twenty-nine months previous to the date at which the candidate intends to begin residence. No certificates from preparatory schools or from preparatory departments of colleges will be accepted in lieu of entrance examinations.

In order to be credited toward entrance, the candidate's credentials, together with (1) the statement of the extent and character of her preparation in each subject offered (see School Record, page 19), and (2) any certificates for science laboratory work or drawings that she has to present, must be in the hands of the Committee on Admissions on or before August 1 for admission in September, and on or before January 1 for admission in February.

**State Education Department Examinations.** — Candidates for admission on the credentials of the New York State Education Department should notify the Secretary to the Committee on Admissions of Barnard College of their intention on or before August 1 for admission in September and on or before December 1 for admission in February, in order that sufficient time may be allowed for obtaining their records from the Education Department.

<sup>1</sup> The numerical ratings of the Board are accepted by the College, but the passing mark is fixed by the Committee on Admissions.  
<sup>2</sup> 75% will ordinarily be regarded as the lowest passing mark in these examinations.



*In these examinations 75% will ordinarily be regarded as the lowest passing mark. These examinations will be subject to the same rules as to series and dates as other examinations (see page 20).*

The subjects for which the State credentials are accepted and their value in Barnard entrance units are as follows:

	State Education Department counts	Barnard units
<sup>1</sup> Biology (Advanced) . . . . .	5	1
<sup>1</sup> Chemistry . . . . .	5	1
<sup>1</sup> Drawing, Elementary Design, and Elementary Representation, and Intermediate Drawing . . . . .	6	1
English, Four Years (including literature questions). . . . .	14-16	3
French, elementary, Two Years . . . . .	10	2
French, intermediate, Third Year. . . . .	5	1
French, advanced, Fourth Year . . . . .	5	1
German, elementary, Two Years . . . . .	10	2
German, intermediate, Third Year . . . . .	5	1
German, advanced, Fourth Year . . . . .	5	1

Greek:

Grammar and Composition . . . . .	} 10	2
Second Year Greek . . . . .		
Translation of Prose at Sight . . . . .		
Third Year Greek . . . . .	5	$\frac{1}{2}$
Advanced Prose Composition . . . . .	0	$\frac{1}{2}$

<sup>1</sup> History:

<sup>1</sup> Ancient or Major Sequence, Course A . . . . .	5	1
<sup>1</sup> Modern, Parts I and II or Major Sequence, Course B . . . . .	6-5	1
<sup>1</sup> English . . . . .	5	1
<sup>1</sup> American and Civics or Major Sequence, Course C . . . . .	5	1
Italian, elementary, Two Years. . . . .	10	2
Italian, intermediate, Third Year . . . . .	5	1

Latin (*for candidates offering 4 units*):

Latin Three Years . . . . .	15	3
Latin Fourth Year . . . . .	5	1

Latin (*for candidates offering 2 or 3 units*):

Second Year Latin . . . . .	8	2
Latin, Third or Fourth Year . . . . .	5	1

<sup>1</sup> Credit cannot be secured in these subjects unless the following requirements are met:

(a) In all natural sciences teachers' certificates of laboratory work, covering exercises described in the definitions of requirements in each subject (pp. 32-49), must be presented in accordance with the regulations stated on page 51. In doubtful cases the candidate will be required to submit a certified laboratory note-book.

(b) In drawing a teacher's certificate, covering at least twenty drawings, must be presented in accordance with the regulations stated on page 51.

(c) In history only the five-count electives will be accepted.

## Mathematics:

Algebra . . . . .	}	7	2
Intermediate Algebra . . . . .			
Plane Geometry . . . . .		5	1
Solid Geometry . . . . .		2	$\frac{1}{2}$
Plane Trigonometry . . . . .		2	$\frac{1}{2}$
Advanced Algebra . . . . .		2	$\frac{1}{2}$
<sup>1</sup> Physics . . . . .		5	1
<sup>1</sup> Physiography . . . . .		5	1
Spanish, elementary, Two Years . . . . .		10	2
Spanish, intermediate, Third Year . . . . .		5	1
Spanish, advanced, Fourth Year . . . . .		5	1

**Summer Session Work in Lieu of Entrance Examinations.** — A grade of C (in some courses, B) in the following courses of the Summer Session of Columbia University will fulfill entrance requirements or remove entrance conditions in the subjects specified in each case:

Chemistry sA — for Chemistry

English sX — for English 1, grammar and composition, taken as review work, provided a grade of B is obtained

English sY — for English 2, literature, taken as review work, provided a grade of B is obtained

French sA1, sA01, sA2, sA02 — for elementary French

French sB1, sB01 — for intermediate French

French sB2, sB02 — for advanced French

Geography s25 — for physiography

German sA1, sA2 — for elementary German

German sB1, sB01 — for intermediate German

German sB2, sB02 — for advanced German

Italian sA1, sA01, sA2 — for elementary Italian

Latin sX2 — for 2 years Latin, taken as review, provided a grade of B is obtained

Latin sY2 — for Cicero, if the student has already completed the reading of third year Latin, and provided a grade of B is obtained

Latin sY1 — for Vergil, if the student has already completed the reading of fourth year Latin, and provided a grade of B is obtained

Latin sZ — for advanced Latin prose composition, provided a grade of B is obtained

Mathematics sX — for intermediate algebra, if taken as review, and provided a grade of B is obtained

Mathematics sY — for plane geometry, if taken as review, and provided a grade of B is obtained

Mathematics sA1, sA5, sA7 — for the corresponding parts of advanced mathematics

<sup>1</sup> Credit cannot be secured in these subjects unless the following requirements are met:

(a) In all natural sciences teachers' certificates of laboratory work, covering exercises described in the definitions of requirements in each subject (pp. 32-49), must be presented in accordance with the regulations stated on page 51. In doubtful cases the candidate will be required to submit a certified laboratory note-book.



Physics sA1 and sA2 — for physics

Spanish sA1, sA01 and sA2, sA02 — for elementary Spanish

Spanish sB1, sB01 — for intermediate Spanish

Other Summer Session courses may be counted as fulfilling entrance requirements only by special permission.

**Entrance Conditions and Probation.** — A candidate for admission who has not secured the prescribed fifteen units may be admitted to the freshman class with conditions, if, in the judgment of the Committee on Admissions, she is qualified to undertake the work of the class. General deficiency in any prescribed subject will disqualify for admission. Except for reasons of weight, a student who has failed to complete a course in a good high school or preparatory school will not be admitted with conditions.

*All entrance conditions must be removed within one calendar year from the date of entrance.*

A student admitted conditionally or by credentials from another college or from the State Education Department will be held under probation during the first winter or spring session of residence. By Tuesday of the week preceding the Thanksgiving holidays, each department in which students on probation attend will make to the Committee on Instruction a special report of progress in the case of every such student. The Dean, on the recommendation of the Committee on Instruction, will as soon as practicable after the mid-year examinations decide as to each student on probation whether she shall be admitted to full standing, have her period of probation extended, or be dropped from the roll.

The mark C, B, or A, obtained at the end of the first winter or spring session of residence, in a course of a higher grade than the entrance requirement, will be regarded as removing an entrance condition in that subject, unless the condition was incurred in a part of the subject not directly involved in the work of the college course. To remove a condition by college work a mark of at least thirty-five per cent must have been obtained in an entrance examination. Any condition not so removed must be satisfied by a regular entrance examination for which an application must be filed and a fee paid precisely as required of a candidate for admission. (Regarding the removal of entrance conditions by work in the Summer Session of Columbia University, see above.)

While work done in University Extension courses is not primarily accepted in lieu of entrance examinations, *entrance conditions* may be removed by a grade of at least C subsequently obtained in the appropriate extension courses. Students in college who desire to avail themselves of this privilege must submit their choice of extension courses for the approval of the Committee on Instruction as a part of their regular college work. (For the general regulations regarding the election of extension courses, see page 64.)

### ADMISSION TO ADVANCED STANDING

Students who have satisfactorily completed at least a year of work at an acceptable college or scientific school or foreign institution of equivalent grade may be admitted with such advanced credit as their previous records may warrant.

Each candidate should send to the Committee on Admissions with her application blank a catalogue of her college plainly marked, showing entrance credit and courses taken. These should be accompanied by an official transcript of her college record, including entrance credit. If for any reason a student cannot obtain an official record until the end of the term, she may substitute her report cards. One or the other must be in the hands of the Committee on Admissions before the Committee on Transfers can estimate her standing in Barnard College. The Committee on Transfers may give an applicant a tentative estimate of the number of points that she may receive as credit toward a Barnard College degree and the prescribed work, not previously taken, from which she may be excused. Final determination of these matters lies with the Committee on Transfers, which reserves the right of readjusting credit at any time. These reports should be received by the Committee on Admissions by July 1 for admission in September and by December 1 for admission in February; otherwise action on the case may be delayed until just before the opening of college. Final action on admission depends upon (1) honorable dismissal, (2) certificate of good moral character from an authorized representative of her college, and (3) certificate of sound health.

No applicant may enter the senior class as a candidate for a degree after October 15 in any year, and no student will receive a degree who has resided less than two full sessions (winter or spring) at Barnard College. (See also paragraph 6, page 63.)

Candidates for admission to the freshman class offering by examination more than the required 15 units may be given credit toward a degree for this extra work, on a basis to be determined by the Committee on Admissions, provided that not more than 18 of the 120 points for a degree may be gained in this way.

### ADMISSION AS SPECIAL STUDENTS

Women who wish, without working toward a degree, to make a serious study of some subject or group of subjects, may, with the approval of the Committee on Admissions, enter Barnard as non-matriculants. They need not pass formal entrance examinations, but they must submit satisfactory credentials in regard to character and qualifications for the courses they wish to take.

Candidates for admission as non-matriculants must be at least 18 years of age. They may not pursue merely elementary courses. They must not, within ten months of the time of application, have been rejected or become deficient as regular students.

They will be held to the observance of the same regulations as to attendance, examination in course, proficiency and deficiency as regular students. They are also subject to the usual health regulations (see page 77).

They are entitled to a formal statement as to the satisfactory completion of the work that they have taken. They may, in view of a good record in college courses, be transferred by the Committee on Instruction to the matriculated basis as candidates for a degree.



DEFINITIONS OF REQUIREMENTS<sup>1</sup>

Specimens of the question papers set by Columbia University may be obtained from the Secretary to the Committee on Admissions upon application. The question papers of the College Entrance Examination Board are published annually in book form by Ginn & Company. Separate question papers remaining from the examinations may also be purchased from the Secretary of the Board, 431 West 117th Street, New York.

For a more detailed statement of the requirements in biology, botany and physiography, or lists of suitable laboratory experiments in chemistry and physics the reader is referred to the pamphlet of the College Entrance Examination Board containing definitions of the requirements in each subject.

## BIOLOGY

The courses named below should be developed on the basis of laboratory study guided by definite directions. This should be supplemented by the careful study of at least one modern elementary text-book. At least one half of the time should be devoted to the practical studies of the laboratory. Pupils should be encouraged to do supplementary work in the line of natural history, *especially* if good nature studies have not preceded the high school course. A note-book with carefully labeled outline drawings of the chief structures studied anatomically, with notes on demonstrations, and in explanation of drawings, with descriptions of experiments, with dates and with index, should be prepared by the pupil in connection with practical work.

Course I — a year of biology with emphasis on the applications of biology to human welfare.

Course II — a year of biology with emphasis on the structure and functions of plants and animals.

## Examinations in Biology

The examination in biology will include questions upon the following divisions of the subject:

- (1) the structure of plants and animals
- (2) the physiology, life-history, and classification of plants and animals
- (3) the applications of biology to human welfare

Students in Course I who wish to prepare for examination with special reference to the applications of biology to human welfare should study the topics (except those marked *Optional*) under A, B, C, and F III of the Outline of Work below that relate to one alga, three fungi (bacteria, yeasts, molds), one angiosperm, one protozoan, one insect, two vertebrates (human body and frog recommended) together with a consideration of cells and heredity.

Students in Course II who wish to prepare for examination with special reference to the structure and functions of plants and animals should study the topics (except those marked *Optional*) suggested below under A, B, C, F I, and F II that relate to at least one alga, one fungus, one moss *or* one fern, two angiosperms, one protozoan, an annelid *or* a crustacean, two insects and two vertebrates, together with the economic aspects of the forms studied, and the simple principles of classification of one plant group (*e.g.*, angiosperms) and of one animal group (*e.g.*, insects *or* vertebrates).

A teacher's certificate of laboratory work must be presented. (See page 51.) *The candidate must be prepared to submit an indexed note-book of her laboratory work in case the rest of her record in the subject, including the certificate, is not fully satisfactory.*

<sup>1</sup> The relative value of subjects is expressed in units according to the time required for adequate preparation in them: a unit in the sense here used represents a course of five periods weekly throughout an academic year of the preparatory school.

## BOTANY (counting one unit)

The candidate should have received training by means of the laboratory method in:

The structure and the more obvious features of the life history of at least ten types among the higher seed plants chosen from the more representative families (*e.g.*, Gramineæ, Liliaceæ, Salicaceæ, Ranunculaceæ, Rosaceæ, Leguminosæ, Cruciferæ, Solanaceæ, Labiatæ, Compositæ). In addition to these, the following types are recommended among the remaining lower groups of plants: pine, *Selaginella*, a fern, a moss (*Polytrichum* or *Funaria*), an hepatic, *Marchantia*, a bacterium, a yeast, a mold, an agaric, *Vaucheria*, *Spirogyra*, and a protophyte (preferably *Spharella*).

Morphology of shoot, root, and seed. This work covers the growth, character, relation, and function of the more important tissues of the stem, leaf, bud, and root, together with a study of the more common variations of these organs. The work on the seed includes the structure and homologies of the principal types, nature of reserve food, the renewal of growth of the seed, and the development of the seedling.

Physiology. This work should cover the essential facts concerning irritability, photosynthesis, respiration, digestion, growth, and reproduction.

Ecology. The natural history of plants should receive considerable attention, and the behavior of plants toward environmental factors (especially light and moisture), dissemination, cross and close pollination, and the more important structural and physiological characteristics of plant formations (hydrophytes, halophytes, mesophytes, and xerophytes) should be included.

A teacher's certificate of laboratory work must be presented. (See page 51.) *The candidate must be prepared to submit an indexed note-book of her laboratory work in case the rest of her record in the subject, including the certificate, is not fully satisfactory.*

## CHEMISTRY (counting one unit)

The candidate's preparation in chemistry should include:

a. The study of a standard text-book to the end that the pupil may gain a comprehensive and connected view of the most important facts and laws of elementary chemistry.

b. Instruction by lecture-table demonstrations, to be used mainly as a basis for questioning upon the general principles involved in the pupil's laboratory investigations.

c. Individual laboratory work, comprising at least forty exercises.

A teacher's certificate of laboratory work must be presented. (See page 51.) *The candidate must be prepared to submit an indexed note-book of her laboratory work in case the rest of her record in the subject, including the certificate, is not fully satisfactory.*

The following outline includes only the indispensable things which must be studied in the classroom and laboratory. The material is, for the most part, common to all elementary text-books and laboratory manuals. The order of presentation will naturally be determined by each teacher for himself.

*Outline.* — The chief physical and chemical characteristics, the preparation and the recognition of the following elements together with their principal compounds: oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur, phosphorus, silicon, potassium, sodium, calcium, magnesium, zinc, copper, mercury, silver, aluminum, lead, tin, iron, manganese, chromium.



More detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds such as: water, hydrochloric acid, carbon-monoxide, carbon-dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur-dioxide, sulphuric acid, hydrogen sulphide, sodium-hydroxide, ammonium-hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flames, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and Boyle's and Charles's laws, symbols and nomenclature, atomic and ionization theory, atomic weights, valency (in a very elementary way), nascent state, natural grouping of the elements, solution solvents and solubility of gases and solids and liquids, saturation, strength of acids and bases, conservation and dissipation of energy, chemical energy, electrolysis. Chemical terms should be clearly understood and the pupil should be able to illustrate and apply the ideas they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts.

#### DRAWING (counting one unit)

The candidate's preparation in drawing should be directed toward training her in accurate observation and in definite and truthful representation of form, without attempt to represent color or color values.

The candidate should be able to draw correctly and with lines of good quality simple forms in correct perspective in the size in which they are felt in the plane of the drawing, or larger or smaller. It is recommended that pupils should be taught to draw from the object itself rather than from the flat.

The elementary principles of perspective are to be thoroughly learned, and the candidate should be able to apply them in freehand drawing from the object or from the imagination.

No definite prescription as to method of teaching is made. The examination will test the preparation of the candidate in the following points:

1. Ability to sketch from the object with reasonable correctness as to proportion, structure, and form. It is recommended that the subjects drawn include simple geometrical objects and simple natural objects such as living plant forms.
2. Ability to sketch freehand from dictation with reasonable accuracy any simple geometrical figure or combination of figures.
3. Ability to represent accurately in perspective a simple geometrical solid of which projection drawings are given, and ability to make consistent projection drawings of a simple geometrical solid of which a perspective representation is given.
4. Ability to answer questions in regard to the principles involved in making these drawings.

Each candidate must present a teacher's certificate for the drawings executed. (See page 51.) *The candidate must be prepared to submit a set of twenty drawings, displaying proficiency in the points mentioned above, in case the rest of her record in the subject is not fully satisfactory.*

Correctness of proportion and accuracy in the angles and curves and structural relations of the parts of every figure or object drawn are of the highest importance, and in laying out the drawings great care should be taken in the use of construction lines, and in the drawing of general masses and contour before the details are begun.

A certain proportion of shade drawings from casts may be included, but they

are not required and should not form the majority of the drawings. If drawings are submitted, they should be of uniform size, and fastened together, not rolled.

## ENGLISH

### Elementary (counting three units)

(For Comprehensive Examination, see page 50)

The entrance examinations in English are given upon the plan recommended by the National Conference on Uniform Entrance Requirements in English, and adopted by the College Entrance Examination Board.

#### Definition of the Requirement for the Restricted Examination 1929-1934

**Objects of Study.** — The study of English in school has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation.

*Habits of correct, clear, and truthful expression.* — This part of the requirement calls for a carefully graded course in oral and written composition, and for instruction in the practical essentials of grammar, a study which ordinarily should be reviewed in the secondary school. In all written work constant attention should be paid to spelling, punctuation, and good usage in general as distinguished from current errors. In all oral work there should be constant insistence upon the elimination of such elementary errors as personal speech-defects, foreign accent, and obscure enunciation.

*Ability to read with intelligence and appreciation works of moderate difficulty; familiarity with a few masterpieces.* — This part of the requirement calls for a carefully graded course in literature. Two lists of books are provided from which a specified number of units must be chosen for reading and study. The first contains selections appropriate for the earlier years in the secondary school. These should be carefully read, in some cases studied, with a measure of thoroughness appropriate for immature minds. The second contains selections for the closer study warranted in the later years. The progressive course formed from the two lists should be supplemented at least by home reading on the part of the pupil and by class-room reading on the part of pupils and instructor. It should be kept constantly in mind that the main purpose is to cultivate a fondness for good literature and to encourage the habit of reading with discrimination.

#### Description of the Examinations

##### English 1-2 (counting three units)

The examination will be in two parts. The first part on Grammar and Composition will test powers of correct, clear, truthful expression. The candidate will write one or more compositions several paragraphs in length. For this purpose a list of eight or ten subjects will be provided. These may be suggested in part by the books recommended for reading, but a sufficient number from other sources will make it possible for the candidate to draw upon her own experience and ideas. She will not be expected to compose at a more rapid rate than three hundred fifty words an hour, but her work must be free from common errors in grammar, idiom, spelling, and punctuation, and should show that she understands the principles of unity and coherence. In addition, questions may be asked on the practical essentials of grammar, such as the construction of words and the relation of various parts of a sentence to one another.



The second part on Literature will test the faithfulness with which the candidate has studied the works recommended for study and her ability to grasp quickly the meaning of a passage of prose or verse that she has not previously seen, and to answer simple questions on its literary qualities. No candidate will be passed on this part of the examination whose work shows serious defects in composition.

In connection with the second part of the examination the candidate may be required by the college to submit a statement certified by her principal specifying what books she has read during her secondary school course, and indicating the quality and character of her spoken English.

### List of Books, 1929-1934

**1. Books for Reading.** — From each group two selections are to be made, except that for any book in Group V a book from any other may be substituted; provided that for any or all works or collections in the following list there may be substituted any work or collection of similar kind and comparable importance from the list of readings suggested for the Comprehensive Examination.

GROUP I. Cooper, *The Last of the Mohicans*; Dickens, *A Tale of Two Cities*; George Eliot, *The Mill on the Floss*; Scott, *Ivanhoe* or *Quentin Durward*; Stevenson, *Treasure Island* or *Kidnapped*; Hawthorne, *The House of the Seven Gables*.

GROUP II. Shakspeare, *The Merchant of Venice*, *Julius Cæsar*, *King Henry V*, *As you Like It*, *The Tempest*.

GROUP III. Chaucer, *Canterbury Tales* (selections); Scott, *The Lady of the Lake*; Coleridge, *The Ancient Mariner*; and Arnold, *Sohrab and Rustum*; a collection of representative verse, narrative and lyric; Tennyson, *Idylls of the King* (any four); Beowulf in a translation of recognized excellence; the *Aeneid* or the *Odyssey* or *The Iliad* in a translation of recognized excellence, with the omission, if desired, of Books I-V, XV, and XVI of the *Odyssey*, and Books XI, XIII-XV, and XXI of *The Iliad*; Longfellow, *Tales of a Wayside Inn*.

GROUP IV. The Old Testament (the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther); Irving, *The Sketch Book* (about 175 pages); Addison and Steele, *The Sir Roger de Coverley Papers*; Macaulay, *Lord Clive* or *History of England*, Chapter III; Franklin, *Autobiography*; Emerson, *Representative Men*.

GROUP V. A modern novel; a modern biography or autobiography; a collection of short stories (about 250 pages); a collection of contemporary verse (about 150 pages); a collection of scientific writings (about 150 pages); a collection of prose writings on matters of current interest (about 150 pages); a selection of modern plays (about 250 pages).

All selections from this group should be works of recognized excellence.

**2. Books for Study.** — One selection is to be made from each of Groups I and II, and two from Group III.

GROUP I. Shakspeare, *Macbeth*, *Hamlet*.

GROUP II. Milton, *L'Allegro*, *Il Penseroso*, and either *Comus* or *Lycidas*; Browning, *Cavalier Tunes*, *The Lost Leader*, *How They Brought the Good News from Ghent to Aix*, *Home Thoughts from Abroad*, *Home Thoughts from the Sea*, *Incident of the French Camp*, *Hervé Riel*, *Pheidippides*, *My Last Duchess*, *Up at a Villa — Down in the City*, *The Italian in England*, *The Patriot*, *The Pied Piper*, "*De Gustibus —*" *Instans Tyrannus*, *One Word More*.

GROUP III. Burke, *Speech on Conciliation with America*; Macaulay, *Life of Johnson*; Carlyle, *Essay on Burns*, with a brief selection from Burns's Poems; Lowell, *On a Certain Condescension in Foreigners*, and *Democracy*; Lincoln, *Speech at Cooper Union*, his *Farewell to the Citizens of Springfield*, his brief addresses at Indianapolis, Albany, and Trenton, the speeches in Independence Hall, the two Inaugurals, the *Gettysburg Speech*, and his Last Public Address, together with a brief memoir or estimate of Lincoln.

### Definition of the Requirement for the Comprehensive Examination 1929-1934

The requirement under the Comprehensive Plan is identical with the requirement under the Restricted Plan except that no books are prescribed for reading and study, the selection of suitable works being left to the preparatory school. The appended list of works is in no sense prescriptive, but indicates by example the kind of literature secondary school pupils should be taught to appreciate.

## The Comprehensive List

GROUP I. All books in the eight groups named in the "Books for Reading" and "Books for Study" Lists.

GROUP II. Shakspeare, *A Midsummer-Night's Dream, Twelfth Night, King John, Richard II, Richard III, Coriolanus*; Sheridan, *The Rivals, The School for Scandal*; Goldsmith, *She Stoops to Conquer*; plays by modern authors, such as Barrie, Pinero, and Shaw.

GROUP III. Malory, *Morte d'Arthur* (selections); Bunyan, *Pilgrim's Progress*, Part I; Swift, *Gulliver's Travels* (Voyages to Lilliput and to Brobdingnag); Defoe, *Robinson Crusoe*, Part I; Goldsmith, *The Vicar of Wakefield*; Frances Burney, *Evelina*; Scott, Novels, such as *The Heart of Midlothian, Guy Mannering*; Jane Austen, Novels, such as *Pride and Prejudice, Mansfield Park, Emma*; Dickens, Novels, such as *David Copperfield, Old Curiosity Shop, Great Expectations, Oliver Twist*; Thackeray, Novels, such as *Henry Esmond, Pendennis*; George Eliot, *Adam Bede, Romola, Silas Marner*; Mrs. Gaskell, *Cranford*; Kingsley, *Westward Ho!, Hereward the Wake*; Trollope, *The Warden, Barchester Towers*; Lytton, *The Last Days of Pompeii*; Blackmore, *Lorna Doone*; Hughes, *Tom Brown's School Days*; Stevenson, *David Balfour, Dr. Jekyll and Mr. Hyde*; Kipling, *Kim, Captains Courageous, Jungle Books*; Meredith, *The Ordeal of Richard Feverel*; Hardy, *The Return of the Native, The Mayor of Casterbridge*; Galsworthy, *The Forsyte Saga*; Conrad, Novels, such as *The Rescue, The Nigger of the Narcissus, Typhoon*; Cooper, Novels, such as *The Spy, Deerslayer, Pathfinder*; Hawthorne, *Twice Told Tales*; Howells, *The Rise of Silas Lapham*; Wister, *The Virginian*; Cable, *Old Creole Days*; short stories by various standard writers, as Poe, Bret Harte, Aldrich, Page, and Barrie.

GROUP IV. Addison and Steele, *Tatler and Spectator* (selections); Boswell, *Life of Johnson* (selections); Irving, *Life of Goldsmith*; Southey, *Life of Nelson*; Lamb, *Essays of Elia*; Lockhart, *Life of Scott* (selections); Thackeray, *English Humorists* (lectures on Swift, Addison, and Steele); Macaulay, *Warren Hastings, Milton, Addison, Goldsmith, Frederick the Great, Madame d'Arblay*; Trevelyan, *Life of Macaulay* (selections); Thoreau, *Walden*; Parkman, *The Oregon Trail*; Warner, *In the Wilderness*; Curtis, *Prue and I, The Public Duty of Educated Men*; Stevenson, *An Inland Voyage, Travels with a Donkey*; Huxley, *Autobiography* and selections from *Lay Sermons*, including the addresses *On Improving Natural Knowledge, A Liberal Education, and On a Piece of Chalk*; Hudson, *Idle Days in Patagonia*; Clemens, *Life on the Mississippi*; Riis, *The Making of an American*; Bryce, *The Hindrances to Good Citizenship*; a collection of essays by Bacon, Lamb, DeQuincey, Hazlitt, Ruskin, Emerson, Burroughs, and later writers; a collection of letters by various standard writers.

GROUP V. Palgrave, *Golden Treasury*, First Series (selections); Pope, *The Rape of the Lock*; Goldsmith, *The Traveler and The Deserted Village*; a collection of English and Scottish ballads; for example, some Robin Hood ballads, *The Battle of Otterburn, King Estmere, Young Beichan Bewick and Grahame, Sir Patrick Spens*, and a selection from later ballads; Macaulay, *The Lays of Ancient Rome, The Battle of Naseby, The Armada, Ivy*; Tennyson, *The Princess*; Arnold, *The Forsaken Merman, Balder Dead*; selections from American poetry, with special attention to Poe, Lowell, Longfellow, Whittier, and Holmes.

## FRENCH

(For Comprehensive Examination, see page 50)

## a. Elementary (counting two units)

Candidates who pursue the study of French after admission to college will be subjected to an individual test in reading and pronunciation, but credit for admission will not depend upon such test.

a. Grammar, Reading, and Elementary Prose Composition: (1) The rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles, and pronouns; the use of personal pronouns, common adverbs, prepositions and conjunctions; the order of words in the sentence, and the elementary rules of syntax; (2) translation at sight into English of easy dialogue or narrative prose; (3) translation into French of easy detached sentences from the language of everyday life illustrative of elementary grammatical principles and of simple idioms.

*The Aim of the Instruction.* — At the end of the elementary course the pupil should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar, as defined below.

*The Work to be Done.* — During the first year the work should comprise:



(1) careful drill in pronunciation; (2) the rudiments of grammar as outlined in *a*, above; (3) abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar but also to cultivate readiness in the reproduction of natural forms of expression; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation.

During the second year the work should comprise: (1) the reading of from 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

Suitable texts for the second year are: Daudet, *Le Petit Chose*; Erckmann-Chatrian, stories; Halévy, *L'Abbé Constantin*; Labiche et Martin, *Le Voyage de M. Perrichon*; Lavis, *Histoire de France*.

#### b. Intermediate (counting one unit)

**b. Grammar, Reading, and Intermediate Prose Composition:** (1) The principles of French grammar in their application to ordinary prose; (2) translation into English of moderately difficult prose or poetry, recent or classical; (3) translation into French of easy connected prose or the original composition in French of a simple passage.

*The Aim of the Instruction.* — At the end of the intermediate course the pupil should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course.

*The Work to be Done.* — This should comprise the reading of from 400 to 600 pages of French of ordinary difficulty, a portion to be in the dramatic form; constant practice in giving French paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; the study of a grammar of moderate completeness; writing from dictation.

Suitable texts for the third year are: Bazin, *Les Oberlé*; Dumas, novels; Merimée, *Colomba*; Sandeau, *Mlle. de la Seiglière*; de Tocqueville, *Voyage en Amérique*.

#### c. Advanced (counting one unit)

*The Aim of the Instruction.* — At the end of the advanced course the pupil should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult French not earlier than that of the seventeenth century; to write in French a short essay on some simple subject connected with the works read; to put into French a passage of easy English prose; and to carry on a simple conversation in French.

*The Work to be Done.* — This should comprise the reading of from 600 to 1,000 pages of standard French, classical and modern, only difficult passages being explained in the class; the writing of numerous short themes in French; the study of syntax.

Suitable texts for the fourth year are: Beaumarchais, *Le Barbier de Séville*; Hugo, *Quatre-vingt treize*, *Les Misérables*; Loti, *Pêcheur d'Islande*; Taine, *L'Ancien régime*; Vigny, *Cinq-Mars*; an anthology of verse; Balzac, *Eugénie Grandet*.

## GERMAN

(For Comprehensive Examination, see page 50)

### a. Elementary (counting two units)

Candidates who pursue the study of German after admission to college will be subjected to an individual test in reading and pronunciation, but credit for admission will not depend upon such test.

a. **Grammar, Reading, and Elementary Prose Composition:** (1) The rudiments of grammar, including the use of the more common prepositions, the simpler uses of the modal auxiliaries, and the elementary rules of syntax and word-order; (2) translation at sight into English of easy dialogue or narrative prose; (3) translation into German of easy detached sentences from the language of everyday life illustrative of elementary grammatical principles and of simple idioms.

*The Aim of the Instruction.* — During the elementary course in German pupils should be taught to read and to understand, when read to them, easy prose. They should also receive systematic training in the oral and written use of the foreign language and be able to turn short, easy English sentences into German.

During the first year the work should comprise: (1) Careful drill in pronunciation. Especial attention should be given at all times to reading aloud and to work in dictation. (2) Systematic study of the essentials of grammar should be begun. Abundant oral and written exercises, definitely planned to enable pupils to use the various parts of speech in sentence form, should always supplement the learning of paradigms and rules. (3) A small amount (40–50 pages) of prepared reading of such a character as to lend itself easily to question and answer work and to other kinds of oral and written exercises in the foreign language. Very easy sight-reading should supplement the prepared work. If translation from the mother tongue is used the first year, the exercises should be limited to easy variations of language material that the pupils have well in hand through previous careful study.

During the second year the essentials of grammar should be completed. Greater emphasis should be given during this year to reading. Some of the easy texts should be read rather rapidly, with sufficient practice in translating into English and partly at sight; others, in whole or in part, should be made the basis of oral and written exercises to increase the pupils' power in the use of the foreign language. Simple dictation and exercises in translating orally and in writing from the mother tongue should regularly accompany the intensive study of the text. This work should be supplemented by reproduction, first in English, later in simple German, of the content of short, easy 'unseen' passages read aloud by the teacher. The prepared reading in the second year should not exceed 125 pages; at least fifty pages should be read at sight.

Suitable texts for the elementary course, after 40–50 pages of very simple reading matter in a beginners' book or elementary reader, are: Andersen's *Märchen*; selections from Baumbach's short stories; Schmid's *Heinrich von Eichenfels*; Volkmann-Leander's *Kleine Geschichten*; one-act plays (such as those of Benedix); selections from Hauff's *Märchen*; Bluthgen's *Das Peterle*



von Nürnberg; Andersen's *Bilderbuch ohne Bilder*; Volkmann-Leander's *Träumereien*; Hillern's *Höher als die Kirche*; Gerstäcker's *Germelshausen*.

Very easy prose texts *not used for assigned work* should be read at sight. Suitable for this purpose are: selections from Grimm's *Märchen*, Goebel's *Rübezahl*, *Die Schildbürger*, and *Till Eulenspiegel*.

#### b. Intermediate (counting one unit)

**b. Grammar, Reading, and Intermediate Prose Composition:** (1) The principles of German grammar in their application to ordinary prose, including syntax, word-order, word-formation, and indirect discourse; (2) interpretation by means of paraphrase, synonymy, or translation into English of moderately difficult prose or poetry, recent or classical; (3) translation into German of easy connected prose or the original composition in German of a simple passage.

*The Aim of the Instruction.* — The aim of the intermediate course is to increase the pupils' power to read and control the foreign language. The various oral and written exercises and the sight-reading practice of the second year should be continued. In oral reading attention should be given to intonation and sentence stress as well as to correctness of pronunciation.

At the end of the course pupils should be able to read at sight selections of modern German prose or poetry not too difficult either in thought or form; to turn into German connected English prose, simple as to form and vocabulary. They should not only have a working knowledge of grammar, but also be able, if called upon, to state clearly and accurately the essential rules.

The reading (350–400 pages) should be confined largely to writers of the modern period. Some of the texts chosen should be read as quickly as possible, consistent with careful work; others should be studied more intensively for both the language and the thought.

Suitable texts for the intermediate course:

1. Narrative prose — Storm, *Immensee*; Gerstäcker, *Irrfahrten*; Zschokke, *Das Abenteuer der Neujahrsnacht*; Baumbach, *Das Habichtsfraulein*, or *Der Schwiegersohn*; Arnold, *Fritz auf Ferien*; Ebner-Eschenbach, *Krambambuli*; Riehl, *Der stumme Ratsherr*; Schücking, *Die drei Freier*; Keller, *Kleider machen Leute*; Raabe, *Die schwarze Galeere*; Otto Ernst, *Asmus Sempers Jugendland*; Seidel, *Leberecht Hühnchen*; Rosegger, *Das Holzknechthaus*; Fouqué, *Undine*; Jensen, *Die braune Erica*; Auerbach, *Brigitta*; Storm, *Pole Poppenspäler*; Frommel, *Mit Ränzel und Wanderstab*; Liliencron, *Anno 1870*; Wildenbruch, *Das edle Blut*, or *Neid*, or *Der Letzte*; Frenssen, *Peter Moors Fahrt nach Südwest*; Meyer-Förster, *Karl Heinrich*; Kroner, *Zriny*.

2. Plays — Moser, *Der Bibliothekar*; Fulda, *Unter vier Augen*; Freytag, *Die Journalisten*; Fulda, *Der Talisman*, or *Das verlorene Paradies*; Schiller, *Wilhelm Tell*.<sup>1</sup>

For oral drill and colloquial practice, a book dealing with German life, customs, and institutions and written in the simplest conversational German should be used.

A liberal amount of reading at sight should be done, using texts not otherwise studied and easier than the regular class texts.

#### c. Advanced (counting one unit)

*The Examination* in Advanced German is similar in form to that in Intermediate German (b), with the requirement that the candidate be able to interpret

<sup>1</sup> In schools with a four years' course, *Wilhelm Tell* should be reserved for the last year. For the benefit of schools with a three years' course, several works listed under Advanced German are indicated (marked \*) as suitable for use at the end of the third year.

at sight any modern German prose or verse involving no technical vocabulary, and to write an original theme with reasonable fluency and correctness.

*The Work to be Done* in the advanced course differs from that in the preceding courses only in amount and degree. The copious reading of numerous modern texts and the intensive study of a few masterpieces selected from the classic and the modern period (in all not less than 500 pages) should occupy the major portion of the time. In addition to the kinds of oral and written work done in the previous courses pupils should have some training in writing short independent themes on simple topics. Considerable attention should also be given to the study of vocabulary as to form and meaning.

Suitable texts for the advanced course:

1. Classic drama (*one of these works should be studied intensively*): Schiller, *Wilhelm Tell*\*, *Jungfrau von Orleans*, *Maria Stuart*; Lessing, *Minna von Barnhelm*; Goethe, *Egmont*.

2. Other plays: Grillparzer, *Die Ahnfrau*\*, *Der Traum ein Leben*; Kleist, *Der Prinz von Homburg*; Wildenbruch, *Harold*; Otto Ernst, *Flachsmann als Erzieher*.

3. Narrative prose: Heine, *Die Harzreise*; Hauff, *Lichtenstein*; Freytag, *Soll und Haben*\*; Sudermann, *Frau Sorge*\*; Meyer, *Das Amulett*; Frenssen, *Jörn Uhl*; Fontane, *Grete Minde*.

4. Historical prose: Selections from Schiller, *Geschichte des Dreissigjährigen Krieges*, or from Freytag, *Bilder aus der deutschen Vergangenheit*.

5. A selection of German lyrics and ballads.

Also, Scheffel, *Der Trompeter von Säckingen*\*; Riehl, *Burg Neideck*; Heyse, *Die Blinden*\*; Hoffman, *Meister Martin der Küfer und seine Gesellen*; Freytag, *Die verlorene Handschrift*; Raabe, *Else von der Tanne*; Hoffmann, *Das Fräulein von Scuderi*; Scheffel, *Ekkehard*; Sudermann, *Der Katzensteg*.

In general, texts should be read rapidly; but see last paragraph under elementary reading list. For colloquial practice specially prepared books dealing with modern life or historical and literary material are recommended.

## GREEK

(For Comprehensive Examination, see page 50)

### Elementary (counting two or three units)

NOTE. — To secure credit for two units in Greek, candidates must offer *a*, *b*, and *g*. To secure credit for three units they must offer *a*, *b*, *c*, *f*, and *g*.

*a. i. Grammar.* — The common forms, idioms, and constructions, and the general grammatical principles of Attic Greek prose.

*ii. Elementary Prose Composition.* — Translation into Greek of detached sentences to test the candidate's knowledge of grammatical construction.

The examination in the two subjects immediately preceding will be based on the first two books of Xenophon's *Anabasis*.

*b. Xenophon.* — The first four books of the *Anabasis*.

*c. Homer.* — The first three books of the *Iliad* (omitting II, 494 – end) and the constructions, poetical forms, and prosody of Homer's *Iliad*.

*f. Prose Composition.* — Translation into Greek of continuous prose based on Xenophon and other Attic prose of similar difficulty.

*g. Sight Translation of Prose.* — Translation into English at sight based on prose of no greater difficulty than Xenophon's *Anabasis*.



## Examinations

A composite paper is offered from which those desiring to be examined in Greek *a*, *b*, and *g*, or in Greek *c* and *f* or in the whole of Greek should select certain specified questions. Candidates taking the examinations in Greek given by the College Entrance Examination Board should usually take the *comprehensive* examination (see pages 21, 50).

## HISTORY

## Elementary

NOTE. — Each of the four divisions, *a*, *b*, *c*, and *d*, counts one unit.

*a. Ancient History*, including a brief introductory study of the Oriental peoples, and early medieval history to the death of Charlemagne, with due reference to art, literature, and government.

*b. Modern European History*, from about 1660 to the present time, with due reference to the growth of the state system.

*c. English History*, with due reference to social and political development.

*d. American History*, with the elements of civil government.

On examination a candidate must show such general knowledge of the subject in each division offered as may be acquired from the study of an accurate textbook of not less than 300 pages. *Since the questions will be so framed as to require comparison and the use of judgment rather than mere exercise of memory on the part of the pupil, it is recommended that the teacher prescribe a course of supplementary reading of not less than 300 pages, dealing with the more important periods and events in each division offered. Geographical knowledge will be tested by requiring the location of places, boundaries, and movements on an outline map.*

## ITALIAN

*a. Elementary* (counting two units)

*The Aim of the Instruction.* — At the end of the course the pupil should be able to pronounce Italian accurately, to read at sight easy Italian prose, to put into Italian simple English sentences taken from the language of everyday life, or based upon a portion of the Italian text read, and to answer correctly questions on the rudiments of the grammar, as defined below.

*The Work to be Done.* — During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the conjugation of the regular and the more common irregular verbs, the inflection of nouns, adjectives, and pronouns, and the elementary rules of syntax; (3) abundant exercises illustrating the principles of grammar; (4) the reading and accurate rendering into good English of from 100 to 175 duodecimo pages of graduated texts, with translation into Italian of easy variations of the sentences read; (5) writing Italian from dictation.

During the second year the work should comprise: (1) the reading of from 250 to 400 pages of modern prose from different authors and of easy poetry; (2) practice in translating Italian into English, and English variations of the text into Italian; (3) continued study of the elements of grammar and of syntax; (4) mastery of all but the rare irregular verb-forms and of the simpler uses of the moods and tenses; (5) writing Italian from dictation.

Suitable texts for the second year are: Stories, plays, and history by different

authors; Farina, *Fra le corde d'un contrabasso*; Goggio, *Due commedie moderne*; Goldoni, *Il vero amico*, *Un curioso accidente*, *La Locandiera*; Marinoni, *Italian Reader*; Pellico, *Le mie prigioni*; Testa, *L'oro e l'orpello*; E. H. Wilkins and Marinoni, *L'Italia*.

**b. Intermediate (counting one unit)**

The regulations governing examinations and credit are the same as those stated for Intermediate French.

**b. Grammar, Reading, and Intermediate Prose Composition:** (1) The principles of Italian grammar in their application to ordinary prose; (2) translation into English of moderately difficult prose or poetry; (3) translation into Italian of easy connected prose or an original composition in Italian upon a subject involving the use of simple vocabulary and idiom.

*The Aim of the Instruction.* — At the end of the intermediate course the pupil should be able to read at sight ordinary Italian prose or simple poetry, to translate into Italian a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course.

*The Work to be Done.* — This should comprise the reading of from 400 to 500 pages of Italian of ordinary difficulty, a portion to be in the dramatic form; constant practice in giving Italian paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; the study of a grammar of moderate completeness; writing from dictation.

Suitable texts for the third year are: stories, plays, and history by different authors; Bergen and Weston, *An Italian Reader of the 19th Century Literature*; Bowen, *Italian Reader*; Fogazzaro, *Peregrinatio*; Giacosa, *Una partita a scacchi*; Manzoni, *I promessi sposi*; E. H. Wilkins and Altrocchi, *Italian Short Stories*; E. H. Wilkins and Marinoni, *L'Italia*.

## LATIN

(For Comprehensive Examination, see page 50)

### Elementary

The entrance examinations in Latin are entirely at sight. Candidates must take the comprehensive examinations.

### Amount and Range of the Reading Required

There will be no prescribed readings in Latin, but the following recommendations are made:

(1) In the second year the early reading should be easy Latin which may be "made" or adapted Latin; not less than one semester of this year should be devoted to the reading of selections from Cæsar. The reading for the year may also include easy selections from such authors as Aulus Gellius, Eutropius, Nepos, Phaedrus, Quintus Curtius Rufus, and Valerius Maximus, or books of selections containing some of these together with other authors of prose works.

(2) In the third year, if the reading be in prose, not less than one semester should be devoted to the reading of selections from Cicero; the reading for the year may also include selections from such authors as Pliny, Sallust, and Livy, or books of selections containing these and other authors of prose works.



(3) In the fourth year, if the reading be in poetry, not less than one semester should be devoted to the reading of selections from Vergil; and the reading for the year may also include selections from such works as the *Metamorphoses*, *Tristia*, *Heroides*, and *Fasti* of Ovid, or books of selections containing poems or extracts from Ovid or from other poets.

## MATHEMATICS

The requirements in mathematics conform in substance to the recommendations for the reorganization of the mathematical curriculum of the secondary school as contained in the report of the National Committee on Mathematical Requirements appointed in 1918 by the Mathematical Association of America.

The requirements in their present form<sup>1</sup> were adopted in 1923 on the recommendation of the Commission on College Entrance Requirements in Mathematics appointed by the College Entrance Examination Board in 1921.

*(For Comprehensive Examination, see page 51)*

### Elementary (counting three units)

#### a. Elementary Algebra (counting two units).

This requirement consists of the two following requirements *ai* and *aii* combined.

*i.* In this requirement are included the following topics:<sup>1</sup> (1) The meaning, use, evaluation, and necessary transformations of simple formulas involving ideas with which the pupil is familiar, and the derivation of such formulas from rules expressed in words. (2) The graph, and graphical representation in general. The construction and interpretation of graphs. (3) Negative numbers; their meaning and use. (4) Linear equations in one unknown quantity, and simultaneous linear equations involving two unknown quantities, with verification of results. Problems. (5) Ratio, as a case of simple fractions; proportion, as a case of an equation between two ratios; variation. Problems. (6) The essentials of algebraic technique. (7) Exponents and radicals; simple cases. (8) Numerical trigonometry.

*ii.* In this requirement are included the following topics:<sup>1</sup> (1) Numerical and literal quadratic equations in one unknown quantity. Problems. (2) The binomial theorem for positive integral exponents, with applications. (3) Arithmetic and geometric series. (4) Simultaneous linear equations in three unknown quantities. (5) Simultaneous equations, consisting of one quadratic and one linear equation, or of two quadratic equations of certain types. Graphs. (6) Exponents and radicals. (7) Logarithms.

*c. Plane Geometry (counting one unit).<sup>1</sup>* The usual theorems and constructions of good text-books, including the general properties of plane rectilinear figures; the circle and the measurement of angles; similar polygons; areas; regular polygons, and the measurement of the circle; the solution of numerous

<sup>1</sup> Only an outline of the requirements is given in this document. For complete definitions, with notes for the guidance of teachers, the reader should consult Documents No. 107 and No. 108 published in 1923. These documents will be sent to any address upon receipt of ten cents a copy which may be remitted in postage upon application to the College Entrance Examination Board, 431 W. 117th St., N. Y. City. A single copy of each document will be sent without charge to any teacher of mathematics.

Document No. 107 defines the requirements in Elementary Algebra, Advanced Algebra, and Trigonometry: Document No. 108, the requirements in Plane Geometry, in Solid Geometry, and in Plane and Solid Geometry.

original exercises, including loci problems; applications to the mensuration of lines and plane surfaces. The examination will consist partly of book propositions and partly of originals.

**Advanced** (counting one-half, one, or one and one-half units)

NOTE. — A candidate may offer one or more of the following subjects, each of which is equivalent to one-half unit.

**b. Advanced Algebra.**

In this requirement are included the following topics.<sup>1</sup> (1) Theory of equations. (2) Determinants. (3) Complex numbers (numerical and geometric treatment), simultaneous quadratics, scales of notation, mathematical induction, permutations and combinations, and probability.

**d. Solid Geometry.** — The usual theorems and constructions of good textbooks; including the relations of planes and lines in space; the properties and measurements of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle; the solution of numerous original exercises, including loci problems; applications to the mensuration of surfaces and solids.

**e. Plane Trigonometry.**

In this requirement are included the following topics: (1) Definition of the six trigonometric functions of angles of any magnitude, as ratios. The computation of five of these ratios from any given one. Functions of  $0^\circ$ ,  $30^\circ$ ,  $45^\circ$ ,  $60^\circ$ ,  $90^\circ$ , and of angles differing from these by multiples of  $90^\circ$ . (2) Determination, by means of a diagram, of such functions as  $\sin(A + 90^\circ)$  in terms of the trigonometric functions of  $A$ . (3) Circular measure of angles; length of an arc in terms of the central angle in radians. (4) Proofs of the fundamental formulas and of simple identities derived from them. (5) Solution of simple trigonometric equations. (6) Theory and use of logarithms, without the introduction of work involving infinite series. Use of trigonometric tables, with interpolation. (7) Derivation of the Law of Sines and the Law of Cosines. (8) Solution of right and oblique triangles (both with and without logarithms) with special reference to the applications. Value will be attached to the systematic arrangement of the work.

**MUSIC** (counting one unit)

NOTE. — The candidate may offer either *a* or *b*.

**a. Musical Appreciation** (counting one unit)

The candidate is expected to have:

1. A general knowledge of the principal musical forms — song, classic dance, fugue, sonata (all movements), symphony — and of their historical development.

2. A general knowledge of the lives and environments of at least ten composers, including Bach, Mozart, Beethoven, Schubert, Chopin, and five of the following: Handel, Gluck, Haydn, Weber, Mendelssohn, Schumann, Wagner, Bizet, Franck, Verdi, Brahms, Rimsky-Korsakov, Tschaikowsky, Debussy, Grieg, MacDowell.

3. <sup>2</sup> Familiarity with certain designated works: *Bach*, Prelude II and Fugue II, Book I, Well-Tempered Clavichord, Gavotte from Sixth English Suite;

<sup>1</sup> A more detailed statement of the requirement, with notes for the guidance of teachers, is contained in Document No. 107.

<sup>2</sup> The examination in (3) will be held only in September and will be open only to candidates who have passed the examinations in (1) and (2).



*Handel*, The Hallelujah Chorus; *Haydn*, Slow Movement from 'Emperor' Quartet (op. 76, No. 3); *Mozart*, Symphony in G Minor (entire); *Beethoven*, Sonata (op. 31, No. 3 entire), Slow Movement from Second Symphony, First Movement from Seventh Symphony; *Schubert*, First Movement from Unfinished Symphony, Song 'The Erl-King,' Song, 'Hark, Hark, the Lark'; *Mendelssohn*, Overture to 'Midsummer Night's Dream'; *Chopin*, Ballade (op. 47), Polonaise (op. 26, No. 1), Nocturne (op. 37, No. 2); *Schumann*, Allegro from Faschingsschwank (op. 26, No. 1), Song, 'Im wunderschönen Monat Mai.'

In the examination in (3) the candidate will be expected to identify characteristic portions of the works set, when played by the examiner, and to give intelligent information concerning the form and character of the works themselves. The test will not require ability to perform or to read from printed music.

#### b. Harmony (counting one unit)

The candidate should have acquired:

1. The ability to harmonize, in four vocal parts, simple melodies of not fewer than eight measures, in soprano or in bass — these melodies will require a knowledge of triads and inversions, of diatonic seventh chords, and inversions, in the major and minor modes; and of modulation, transient or complete, to nearly related keys.

2. Analytical knowledge of ninth chords, all non-harmonic tones, and altered chords (not including augmented chords). (Students are encouraged to apply this knowledge in their harmonization.)

It is urgently recommended that systematic ear-training (as to interval, melody, and chord) be a part of the preparation for this examination. Simple exercises in harmonization at the pianoforte are recommended. The student will be expected to have a full knowledge of the rudiments of music, scales, intervals, and staff-notation, including the terms and expression marks in common use.

#### PHYSICS (counting one unit)

The candidate should be familiar with the elementary principles of physics and some of their practical applications and should be able to solve simple numerical problems. The preparation of the candidate should include:

(a) The study of one of the standard text-books in use in secondary schools.

(b) Instruction by lecture-table demonstrations in which the phenomena of physics are shown and the principles qualitatively illustrated.

(c) Individual laboratory work, comprising at least thirty exercises. A suitable selection of experiments may be made from the list published by the College Entrance Examination Board.

A teacher's certificate of laboratory work must be presented. (See page 50.) *The candidate must be prepared to submit an indexed note-book of her laboratory work, in case the rest of her record in the subject, including the certificate, is not fully satisfactory.*

#### PHYSIOGRAPHY (counting one unit)

NOTE. — This is identical with the subject called Geography by the College Entrance Examination Board.

The candidate's preparation in physiography should include the study of one of the modern text-books by Davis, Tarr, Dryer, or Gilbert and Brigham, together with an approval laboratory and field course of at least forty exercises

actually performed by the candidate. Each division of the subject should receive approximately the same proportion of attention in the laboratory as in the class work. It is suggested that the exercises be divided somewhat as follows: Earth as a Globe, 5; Ocean, 5; Atmosphere, 12; Land, 18.

A teacher's certificate of laboratory work must be presented. (See page 51.) *The candidate must be prepared to submit an indexed note-book of her laboratory work, in case the rest of her record in the subject, including the certificate, is not fully satisfactory.*

## SPANISH

(For Comprehensive Examination, see page 51)

### a. Elementary (counting two units)

*The Aim of the Instruction.* — At the end of the course, the pupil should be able to pronounce Spanish accurately, to read at sight easy Spanish prose, to put into Spanish simple English sentences taken from the language of everyday life, or based upon a portion of the Spanish text read, and to answer questions on the rudiments of the grammar, as defined below.

*The Work to be Done.* — During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the conjugation of the regular and the more common irregular verbs, the inflection of nouns, adjectives, and pronouns, and the elementary rules of syntax; (3) exercises containing illustrations of the principles of grammar; (4) the reading and accurate rendering into good English of from 100 to 175 duodecimo pages of graduated texts, with translation into Spanish of easy variations of the sentences read; (5) writing Spanish from dictation.

During the second year the work should comprise: (1) the reading of from 250 to 400 pages of modern prose from different authors; (2) practice in translating Spanish into English, and English variations of the text into Spanish; (3) continued study of the elements of grammar and syntax; (4) mastery of all but the rare irregular verb-forms and of the simpler uses of the moods and tenses; (5) writing Spanish from dictation.

Suitable texts for the second year are: Valera's *El pájaro verde*; Alarcón's *El capitán Veneno*; Valdés's *José*; Padre Isla's version of *Gil Blas*; Carrión and Aza's *Zaragüeta*; Ford, *Spanish Fables in Verse*; Morrison, *Tres comedias modernas*.

### b. Intermediate (counting one unit)

**b. Grammar, Reading, and Intermediate Prose Composition:** (1) The principles of Spanish grammar in their application to ordinary prose; (2) interpretation by means of paraphrase, synonymy, or translation into English of moderately difficult prose or poetry, recent or classical; (3) translation into Spanish of easy connected prose or the original composition in Spanish of a simple passage.

*The Aim of the Instruction.* — At the end of the intermediate course the pupil should be able to read at sight ordinary Spanish prose or simple poetry, to translate into Spanish a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course.

*The Work to be Done.* — This should comprise the reading of from 400 to 600 pages of Spanish of ordinary difficulty, a portion to be in the dramatic form; constant practice in giving Spanish paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; the study of a grammar of moderate completeness; writing from dictation.



Suitable texts for the third year are: Benavente, *Tres comedias*; Moratín, *El sí de las niñas*; Galdós, *Doña Perfecta*; Valdés, *La hermana San Sulpicio*; Becquer, *Legends, Tales and Poems*.

#### Advanced (counting one unit)

*The Aim of the Instruction.* — At the end of the advanced course the pupil should be able to read at sight any modern Spanish prose or verse in which there is no technical vocabulary; to write a short essay in Spanish on some subject connected with the works read; to translate into Spanish a passage of easy English prose; and to carry on a simple conversation in Spanish.

*The Work to be Done.* — This should comprise the reading of at least 500 pages of modern and classical Spanish; the writing of numerous themes in Spanish; and the study of the finer points of syntax.

Suitable texts for the fourth year are: Alarcón, *El niño de la bola*; Blasco Ibáñez, *La barraca*; Calderón, *La vida es sueño*; Cervantes, *Don Quijote*; Espronceda, *El estudiante de Salamanca*; Galdós, *Electra*; Hills and Morley, *Modern Spanish Lyrics*; *The Oxford Book of Spanish Verse*; Valera, *Pepita Jiménez*.

#### ZOÖLOGY (counting one unit)

The following outline includes the principles of zoölogy which are indispensable to a general survey of the science. It is planned for a full year's course. It is not intended to indicate order of study of the topics — this must be left to the teacher and the text-book.

1. The general natural history — including general external structure in relation to adaptations, life histories, geographical range, relations to other plants and animals, and economic relations — of common vertebrates and invertebrates so far as representatives of these groups are obtainable in the locality where the course is given. The types suggested are a mammal, bird, lizard, snake, turtle, newt, frog, dogfish or shark, bony fish, clam, snail, starfish, earthworm, planarian, hydra, sea-anemone, paramoecium. In the case of arthropods pupils should become familiar with common crustaceans, spiders, myriapods, and insects representing at least five orders. Actual examination of common animals with reference to the above points should be supplemented by reading giving natural history information.

It is not expected that there will be time for making extensive note-books on the natural history work; rather will the work in this line take the form of laboratory demonstrations. So far as time permits, drawings and notes should be made. The note-book mentioned below should contain at least drawings on the external structure of four animals not studied under Section 3, preferably two insects, a mollusk, and a second vertebrate.

2. The classification of animals into phyla and leading classes (except the modern subdivisions of the worms) and the great characteristics of these groups — in the case of insects and vertebrates the characteristics of the prominent orders. The teaching of classification should be by practical work so as to train the pupil to recognize animals and to point out the chief taxonomic characteristics. The meaning of species, genera, and larger groups should be developed by constructive practical work with representatives of insect or vertebrate orders.

3. The general plan of external and internal structure, not the anatomical minutiae, of one vertebrate (preferably frog or fish) in general comparison with the human body; an arthropod (preferably a decapod); an annelid (earthworm or Nereis); a coelenterate (hydroid, hydra, or sea-anemone); a pro-

tozoön (a ciliate, and amœba when possible). In place of any of the above types not locally available there may be substituted a second vertebrate, an insect, a mollusk, or an echinoderm. Tissues, the study of which is recommended as optional,<sup>1</sup> should be examined first with the unaided eye, in such structure as a frog's leg, and then with a microscope to demonstrate the relation of cells and intercellular substance in epithelium and cartilage and, if possible, in other tissues. The functions of the chief tissues and their positions in the body of a vertebrate should be pointed out.

4. <sup>1</sup>(a) The general physiology of the above types, involving the essentials of digestion, absorption, circulation (respiration), cell-metabolism, secretion, excretion, and nervous functions. This should apply comparatively to the essentials of elementary work in human physiology. Demonstrations and experiments, such as are suggested in high school text-books on human physiology, should be introduced, or recalled, if not previously well presented in elementary physiology, in connection with discussion of the chief functions. As far as practicable structure and function should be studied together.

(b) Comparison of the general life-processes in animals and plants (in connection with botany, if zoölogy is first studied).

5. The very general features of a sexual reproduction of a protozoön (preferably *Paramœcium*); alternation of generations in hydroids; reproduction and regeneration of *Hydra*; the very general external features of embryological development in a fish or frog; and (*optional*) the general cellular nature (not centrosomes and the like) of germ-cells, fertilization, and cell-division in developing eggs should, as far as possible, be demonstrated and briefly described. Also, the most interesting features of development should be pointed out in the case of other animals studied.

6. The prominent evidence of relationship suggesting evolution, within such groups as the decapods, the insects, and the vertebrates, should be demonstrated. A few facts indicating the struggle for existence, adaptation to environment, variations of individuals, and man's selective influence should be pointed out; but the factors of evolution and the discussion of its theories should not be attempted.

7. (*Optional*.<sup>1</sup>) Some leading facts regarding the epoch-making discoveries of biological history and the careers of such eminent naturalists as Darwin, Huxley, Pasteur, and Agassiz should be presented.

The above outline of a course in general zoölogy should be developed on the basis of a course of laboratory study guided by definite directions. This should be supplemented by the careful reading of at least one modern elementary text-book in general zoölogy. At least two-thirds of the time should be devoted to the practice studies of the laboratory. If good nature studies have not preceded the course in high school zoölogy, pupils should be encouraged to do supplementary work in the line of natural history. A note-book with carefully labeled outline drawings of the chief structures studied anatomically (Section 3) and the drawings mentioned under natural history (Section 1) and with notes on demonstration and in explanation of drawings, with dates and an index, must be submitted. It will be graded as one-third of the examination.

A teacher's certificate of laboratory work must be presented. (See page 51.) *The candidate must be prepared to submit an indexed note-book of her laboratory work, in case the rest of her record in the subject, including the certificate, is not fully satisfactory.*

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<sup>1</sup> Topics marked 'optional' are regarded as desirable for the best high school zoölogy, but will not be required in examination.



## DESCRIPTION OF COMPREHENSIVE EXAMINATIONS

**English.** — The purpose of this examination will be to test the ability of the candidate to write clearly and correctly, and to show that she has read, understood, and appreciated a sufficient amount of English literature. The paper will contain some questions that cannot be answered except by candidates who are able to apply what they have learned to the solution of unexpected problems. Success in the examination will not necessarily depend upon a knowledge of the subject-matter of the particular books prescribed in the 'Uniform Entrance Requirements in English' (see page 35), though no candidate who has been intelligently prepared under these requirements should find herself at any disadvantage.

**French.** — The examination will be adapted to the proficiency of those who have studied French in school for two, three, or four years.

The paper will include passages of French prose or verse or both of varying degrees of difficulty to be translated into simple and idiomatic English. It will also contain passages in English of varying degrees of difficulty to be translated into French, and questions on grammar. Opportunity will be given to those who have had special training in French to show their ability to express themselves in that language.

**German.** — The examination will be adapted to the proficiency of those who have studied German in school for two, three, or four years.

The paper will include passages of German prose or verse or both of varying degrees of difficulty to be translated into simple and idiomatic English. It will also contain passages in English of varying degrees of difficulty to be translated into German, and questions on grammar. Opportunity will be given to those who have had special training in German to show their ability to express themselves in that language.

**Greek.** — The examination will be adapted to the proficiency of those who have studied Greek in a systematic school course of five exercises a week, extending through two or three school years.

The paper will include passages of simple Attic prose and of Homer to be translated at sight, and questions, based upon these passages, to afford the candidate means of showing her mastery of the ordinary forms, constructions, and idioms of the language. The paper will also include passages in English to be turned into Greek, and questions on prosody, on the Homeric poems, and on Homeric life.

**Latin.** — The examination will be adapted to the proficiency of those who have studied Latin in a systematic school course of five lessons each week, extending through two, three, or four years.

The paper will include passages of Latin prose and verse of varying degrees of difficulty to be translated at sight, and passages of Latin prose and verse for comprehension. Candidates will be asked questions to test their understanding of these latter passages, but will not be required to translate them. There will be also English passages for Latin composition for candidates presenting two or three years of Latin. Candidates presenting four years of Latin in one examination will also be expected to answer these questions. Accompanying the different passages set upon the paper will be questions on forms, syntax, and the idioms of

the language, as well as questions on the subject-matter, literary and historical, connected with the authors usually read in schools.

Each candidate will choose those parts of the paper which are designed to test such proficiency in the language as may properly be acquired in two, three, or four years' study; but a candidate who has studied Latin four years may not select the more elementary parts of the paper. The proper parts will be indicated on the examination paper.

**Mathematics.** — The examination will be adapted to the proficiency of those who have had not less than the usual school course in elementary mathematics, comprising algebra through quadratics and plane geometry. There will be two papers, one for those who have had no instruction beyond elementary mathematics and one for those whose instruction has gone further.

**Spanish.** — The examination will be adapted to the proficiency of those who have studied Spanish in school for two, three, or four years.

The paper will include passages of Spanish prose or verse or both of varying degrees of difficulty to be translated into simple and idiomatic English. It will also contain passages in English of varying degrees of difficulty to be translated into Spanish, and questions on grammar. Opportunity will be given to those who have had special training in Spanish to show their ability to express themselves in that language.

#### NOTE-BOOKS, DRAWINGS, ETC.

Each candidate must present at the time of examination a certificate from her teacher certifying that the laboratory requirements in each science offered by the candidate have been complied with. A statement of the laboratory requirements in the several sciences will be found in the preceding pages. This regulation applies also to drawing. In all doubtful cases the candidate will be required to submit a laboratory note-book. *This regulation applies to candidates using College Entrance Examination Board, Columbia University, State Education Department, or any other entrance examinations.*

Blank forms may be obtained on application to the Secretary to the Committee on Admissions of the College.

#### REGISTRATION

**Registration.** — Before attending any University exercise each student shall comply with the regulations in regard to registration and payment of fees. She shall present herself in person at the office of the Registrar and shall there file a registration blank giving such information as may be required for the College records.

Every new student shall also at the time of registration file a statement of the courses which the Committee on Instruction has authorized her to pursue. Students already in College shall give notice of their choice of elective courses for each session to the Registrar on dates to be announced from time to time by the Committee on Students' Programs.

The office of the Registrar will be open for registration on Friday, Monday and Tuesday, September 20, 23, and 24, 1929, and on Tuesday, February 4, 1930. New students may register also on Wednesday, September 25, 1929.



Students registering late are charged an additional fee of \$5 and are held accountable for absences thus incurred.

Each student who holds a scholarship shall present her scholarship certificate to the Bursar *at the time of registration*.

Each person whose registration has been completed will be considered a student of the University during the period for which such registration is held valid. No student registering in Barnard shall at the same time be registered in any other school or college, either of Columbia University or of any other institution, without the consent of the Dean.

**Withdrawal.** — An honorable discharge will always be granted to any student in good academic standing, and not subject to discipline, who may desire to withdraw from the College, but no student under the age of twenty-one years shall be entitled to a discharge without the assent of her parent or guardian furnished in writing to the Dean. Students withdrawing are required to notify the Registrar. Application for the return of fees must be made in writing at the time of withdrawal.

#### GENERAL STATEMENT REGARDING FEES AND THE REGULATIONS GOVERNING THEIR PAYMENT

All fees are payable semi-annually in advance at the Bursar's Office, and no reduction is made for late registration. Registration is not complete until registration, tuition and laboratory fees are paid. Payment of fees after the last day of registration (see Academic Calendar) imposes automatically the statutory charge of \$5 for this privilege. In special cases, for reasons of weight, the payment of one half the tuition fee for the session (\$190) may be deferred until mid-term — November 15 or March 15. In such cases the additional fee of \$5 is charged, if the half of the tuition fee is not paid on or before the aforesaid date.

Under the regulations, the privileges of the College are not available to any student delinquent in the payment of her fees.

The fees to be paid by students are subject to change at any time at the discretion of the Trustees.

Checks in payment of all fees, including those for charges in the Residence Halls, should read "Pay to the order of Barnard College."

No application for a return of fees can be considered unless made in writing at the time of withdrawal.

#### FEES

Registration Fee, payable at the opening of each session . . . . . \$10.00

This fee is never refunded.

Late Registration Fee (see page 52) . . . . . \$ 5.00

Tuition payable at the opening of each session . . . . . \$190.00

Students not candidates for a degree are charged at the rate of \$14.00 per point with a maximum fee of \$190.00 per session.

Other students who are compelled for reasons of weight to take a reduced program may, with the approval of the Dean, pay at the rate of \$14.00 per point.

*Rebates.* — After the last day of the period provided for change of course (the second Saturday of each session), no tuition fees will be returned for any course which the student may for any reason discontinue. Exception to this rule may be made only in cases of total withdrawal from the College, when a pro rata return of fees may be authorized by the Registrar. When a rebate is allowed for withdrawal from the College, such rebate will be reckoned from the day upon which the Registrar receives notice from the student.

<b>Student Activities Fee.</b> . . . . .	\$ 3.00
For all regular and unclassified students in the College for each winter or spring session or any part thereof.	
<b>Examination Fee,</b> payable in each case before the examination is held:	
For entrance (see page 23) for each series . . . . .	\$10.00
For late application . . . . .	\$ 5.00
For each and every deficiency or special examination . . . . .	\$ 3.00
(A special or deficiency examination is one taken at any time other than at the conclusion of a course actually attended, whether taken prior or subsequent to admission)	
For the degree . . . . .	\$20.00
This fee is never refunded.	
<b>Deposits</b> for the use of apparatus, material, and the like, are required in	
Chemistry 63, 64, each course . . . . .	\$10.00
Chemistry 41, 42, 65, 66, each course . . . . .	\$12.50
Chemistry 42a, 105, 106, 145, 146, 157, 158, each course. . . . .	\$15.00

## FEES OF STATE SCHOLARS

Each State Scholar should file at the office of the Bursar *on the day of registration* the notice which she has received from Albany stating that a State Scholarship has been awarded to her. On the basis of this official notice she is entitled to a credit of \$50 a session.

A State Scholarship Certificate for each of these students is then sent from Albany to the Bursar, who records all necessary information and forwards the certificate to its owner. This certificate need not be presented again at the Bursar's office.

## DEPOSITORY FOR STUDENTS' FUNDS

For the convenience and protection of students while in residence at the University, the Bursar of Columbia University in Room 310 University Hall is prepared to receive funds for deposit, subject to the printed rules and regulations, copies of which may be obtained at his office upon request. There is no charge for this service other than the exchange on out-of-town checks and drafts.

Personal checks will not be cashed by the University or credit allowed until the money has actually been received from the bank on which the check is drawn. New York drafts, money orders, and travellers' checks may be de-



posited for collection and withdrawals allowed when the cash is received. Students should provide themselves preferably with money orders, bank drafts on New York or travellers' checks for the amount of their expenses, and are advised to open an account with the University on registration.

### DORMITORY FEES

<b>Deposit</b> . . . . .	\$25.00
Payable in advance to secure assignment of room. One half of this deposit is credited each session on payment of rent. The deposit is forfeited if the applicant withdraws after September 1, or, in the case of an applicant entering at the beginning of the spring session, after January 15	
<b>Board</b> . . . . .	\$300.00
Payable in two equal instalments in advance, on or before taking possession of room, and on February 1 <sup>1</sup>	
<b>Rent</b>	
Payable in two equal instalments in advance, on or before taking possession of room, and on February 1 <sup>1</sup>	
Single rooms in Brooks Hall (a few with private bath) . . . . .	\$175-600
Double rooms in Brooks Hall, for each student . . . . .	\$160
Single rooms in Hewitt Hall . . . . .	\$175-300
Double rooms in Hewitt Hall, for each student . . . . .	\$160
Suites in Hewitt Hall (two rooms and bath), for each student . .	\$400-575
<i>Various scholarships ranging in value from \$50.00 to \$700.00 are available for students in need of assistance (see page 66).</i>	

### ESTIMATED NECESSARY EXPENSES

Board and room, \$460-900 for the academic year.  
 Registration fee, \$20.  
 Annual tuition fee, \$380.  
 Student Activities fee, \$6.  
 Text-books, \$20 up each year.  
 Gymnasium costume, averaging \$12.  
 Final examination for the degree, \$20.

### THE PROGRAM OF STUDIES

Upon satisfactory completion of a program arranged according to the regulations described below (pages 55-57), the student is recommended by the Faculty of Barnard College to the Trustees of Columbia University for the degree of Bachelor of Arts. Diplomas are issued only at Commencement and in February and in October upon the completion of the requirements for the degree.

The requirement for graduation is 120 points, exclusive of the prescribed work in physical education. The term point usually signifies the satisfactory completion of work requiring attendance at class, one hour, or in the laboratory, two hours, a week during a winter or spring session.

<sup>1</sup> In special cases, for reasons of weight, the payment of one half the rent and board for a session may be deferred until mid-term — November 15 or March 15.

I. Program of Studies for the degree of Bachelor of Arts

In constructing the present curriculum the Faculty was guided by the following general principles:

- 1. Each student should possess certain fundamental tools, useful for successful work in any field, — that is, a command of written and spoken English, the ability to read at sight with ease at least one foreign language, a healthy body, and a knowledge of hygiene.
- 2. Beyond those needed to give these fundamental tools it is not desirable to prescribe any specific courses or subjects.
- 3. Each student should be required to concentrate her work sufficiently to gain a fairly thorough knowledge of one subject.
- 4. Each student should be required to distribute her work sufficiently to gain some insight into the other main divisions of human thought.

To carry out these general principles, the following specific requirements and regulations were adopted:

Specific Prescriptions

English A . . . . .	6 points
English C . . . . .	1 point
Hygiene A . . . . .	2 points
Physical Education A, B, C, and D.	

Ability to read at sight with ease one of the following languages: French, or German, or Greek, or Latin.<sup>1</sup> This requirement should be satisfied as early as possible in the college course and must be completed before the end of the junior year.

All other work is elective but must include

A major subject of 28 points  
The major must be comprised of work of not less than grade C in some one subject in some one department. It must meet the requirements laid down by the department concerned and announced at the head of the departmental statements on pages 81-126.

Courses amounting to not less than 14 points  
from each of the following groups other than the one in which the major lies. These may be elected without restriction excepting that in  
(a) Group I, the 14 points may include (1) not more than one elementary course in ancient foreign languages and (2) no first-year course in modern foreign languages.  
(b) Group II, 8 of the 14 points must be in one of the following laboratory sciences: botany, chemistry, geology, physics, experimental psychology, or zoölogy.

<sup>1</sup> In individual cases, by special permission of the Committee on Instruction, Italian or Spanish may be substituted for one of these languages.



**Group I. Languages, Literatures and other Fine Arts:**

Ancient Art, Anthropology (Courses 6, 107, 108), Classical Literatures (in translation), English, Esthetics (Department of Philosophy), Fine Arts, French, German, Greek, Italian, Latin, Music, Romance Philology, Science of Language, Spanish.

**Group II. Mathematics and Natural Sciences:**

Anthropology (Courses 3, 4), Astronomy, Botany, Chemistry, Geography, Geology, Mathematics, Mineralogy, Physics, Psychology (Experimental, Developmental, Abnormal), Statistics (Economics 18), Zoölogy.

**Group III. Social Sciences:**

Anthropology (Courses 1, 2, 109, 110), Classical Civilization, Economics, Geography, Government, History, Philosophy, Psychology (Introductory, Comparative, Social, Applications, and Course 118), Religion, Sociology, Statistics (Economics 17).

## II. Program of Studies for the Degree of Bachelor of Arts with the Certificate in Science or Mathematics

Candidates for the degree of Bachelor of Arts who desire to specialize in the natural sciences or in mathematics may elect the foregoing program of studies with the modifications given below. For the satisfactory completion of the specified requirements they will receive on graduation a certificate which will indicate the nature of the program of studies pursued.

This program of studies is the same as the foregoing program, except in the following specific respects:

**A Major Subject** of at least 28 points of not less than grade C in one of the following natural sciences: astronomy, botany, chemistry, geography, geology, mineralogy, physics, experimental psychology, and zoölogy, or in mathematics, and

**Two Minor Subjects** of at least 12 points each, one of which must be allied to the major, both to be chosen from the foregoing list. Anthropology may also be taken as a minor subject.

**Additional Grouped Work** in science, or in mathematics, or in science and mathematics, so as to make a total of at least 60 points in science, or in science and mathematics.

## DEGREE WITH HONORABLE MENTION

Degrees with honorable mention will be awarded to students in the regular course who have had honorable mention for general excellence at the end of each academic year.

## THE HONORS COURSE LEADING TO THE DEGREE OF BACHELOR OF ARTS WITH HONORS IN SPECIAL SUBJECTS

The Honors Course has been arranged for exceptionally well equipped students with a pronounced interest in some one subject. It offers to these an opportunity to do more intensive and better work than the ordinary students, to have more chance for independent study, and at the same time more individual conferences with the professors in their major department. It gives them also the opportunity of attaining, by successful completion of this course, high academic honor.

Entrance into the course is optional with those students who are eligible.

**Eligibility.** — Students who have completed 60 points of work with 75% of grade A and B are eligible as candidates for the Honors Course. The names of students who would be eligible for the course on this basis, *providing the quality of work is sustained until the end of their sophomore year*, will be posted during the third week in March. Students who wish to apply for the course should do so to the Committee on Honors by April 10. Admission to the course will be subject to the approval of the department in which the student elects to work.

In special cases permission will be given to enter the course in the middle of the junior year, providing similar conditions of eligibility are met.

The eligibility percentage will be figured only on the work taken at Barnard College. Summer session courses may count to bring the student's points up to the 60 required for admission to the course, but they will *not* count in the percentage of work of A and B grade.

Ordinarily students who cannot complete their 60 points until the deficiency examinations in September will not be eligible for admission to the Honors Course until the following February.

A student whose name is not on the eligible list may be recommended as a candidate for the Honors Course by any department in which she is doing work of conspicuous excellence and promise. Subject to the approval of the Committee on Honors, such a student shall be admitted to the Honors Course.

**Admission.** — Every department will, at its discretion, assign some work to be done by its candidates during the summer. The result of this work and the students' records as a whole will be scrutinized by the department before a decision is made as to the admission of the candidates. The department may require a qualifying examination or some other form of test.

**Supervision.** — After a student has been admitted to this course the appropriate department takes charge of her work and, subject to the approval of the Faculty, arranges the curriculum to be pursued for a degree with honors in her special subject.

**Prescription.** — Students in the Honors Course are not exempt from the completion of the group requirement, and this requirement includes a laboratory science. Where the completion of the group requirement cannot be taken parallel to the Honors Course, the student should try to satisfy it in summer session courses. This is possible in practically every subject, excepting the laboratory science. Students seriously deficient in the group requirement will not be admitted to the Honors Course.



All honor students are required to pass by the end of their junior year the regular foreign language test required of other students, in French, or German, or Greek, or Latin. They are also required to pass a reading test in another foreign language, to be set by the department in charge of their work before the mid-year examination period of their senior year.

Students failing to meet these requirements are dropped from the Honors Course.

During the junior year students admitted to the Honors Course are held on probation, and at the end of the year if they have not done thoroughly satisfactory work, the Committee on Honors will recommend that they return to the usual course of study.

During the junior year honor students will be expected to take the regular examinations in the courses for which they are registered and to receive grades in their work, the understanding being that examinations may be omitted only in courses that are elected as optional.

In the senior year all regular examinations in the major subject are omitted, examinations in other subjects being at the option of the major department, and at the end of the year the student takes a comprehensive examination in her subject. Students who pass the comprehensive examination with high standing are recommended for the degree with honors in their respective subjects. If the examination is passed only moderately well, the student will receive the degree but without honors.

**Exemption.** — Honor students are exempted from the technical requirements of 120 points, from the usual regulation of class attendance, which in their cases will be under the direction of their major departments, and in their senior year only from the customary system of grading. Honor students are not exempted from the supervision of the Department of Physical Education.

For special requirements see the various departmental statements, pages 81-126.

#### PROGRAM FOR STUDENTS ADMITTED BY TRANSFER FROM OTHER COLLEGES

Students transferring to Barnard College with sufficiently good records from other colleges will be held to the requirements for the degree outlined on pages 55-56. They shall not be exempt from the major or the laboratory science or the language requirement. Such students, if sufficiently able, are eligible for the special Honors Course described above (page 57). Such students are also eligible for transfer to professional schools under the regulations described below (page 59).

The administration of the foregoing provision will be in accordance with the following principles and rules:

1. Such students should have completed at entrance or at other colleges the equivalent of the entrance requirements to Barnard College, as may be determined by the University Committee on Admissions.

2. In general, students who have been accepted by the Committee on Admissions for entrance by transfer to Barnard College, will be admitted to the class to which their previous entrance and college record entitles them. The Committee on Transfers will determine, in conference with the student, in view of her pre-

vious academic record, her experience and maturity, her intellectual interests and professional plans, the program of work that she shall take. In certain cases a year of probation may be required before the status of the student is exactly fixed.

### PREPARATION FOR PROFESSIONAL SCHOOLS

Students who intend to transfer to professional schools are of two classes, those who leave Barnard at the end of the sophomore year, without candidacy for the Bachelor of Arts degree, and those who at the end of the junior year wish to take advantage of the 'combined course,' counting the first year of an approved professional school in place of the senior year at Barnard.

Students intending to transfer to professional schools without candidacy for the degree of Bachelor of Arts are required to take English A and C, Hygiene A, physical education throughout their stay at Barnard, and such other courses as are appropriate in preparation for the professional school to which the transfer is to be made. (See Architecture, Business, Journalism, Medicine, page 60.)

Students with a good record may, by special permission of the Committee on Instruction, count the first year of an approved professional school in place of the senior year at Barnard. To be eligible for this 'combined course' a student must complete at Barnard, before transferring to the professional school, 90 points of academic work including all grouped work and a major of 28 points unless this number is reduced in individual cases by special permission of the Committee on Instruction.

Students transferring to Barnard from other institutions will be granted this privilege of a 'combined course' only if they have an unusually good record, and in no case will the permission of the Committee on Instruction be given until after the student has completed at least one full year of work in Barnard College. (See Architecture, Business, Journalism, Medicine, page 60.)

### COURSES IN THE GRADUATE FACULTIES AND PROFESSIONAL SCHOOLS OPEN TO BARNARD STUDENTS

#### Political Science, Philosophy, and Pure Science

Certain graduate courses in Columbia University under the Faculties of Political Science, Philosophy, and Pure Science which are listed in the Barnard Announcement are open, with the consent of the department concerned and the Committee on Instruction, to specially qualified seniors and, in some cases, juniors. In these courses special arrangements are made for the supervision of the work of undergraduates. Since graduate work is on an entirely different basis of credit from undergraduate work, it is rarely possible for a student in Barnard College to take any graduate courses for which these special arrangements have not been made. Seniors of unusual ability may, however, be permitted in special cases to elect not more than two graduate courses.

Graduate courses, when approved by the Committee on Instruction, may be counted by an undergraduate toward the Bachelor's degree. Or, in case the



student has more points than the number required for that degree, they may, under certain circumstances, be credited toward the Master's degree. For full information concerning the content of the courses, students are referred to the appropriate University announcements mentioned at the end of the departmental statements given below.

### Architecture

After two years of collegiate work in Barnard, amounting to at least 60 points' credit (exclusive of physical education) and including English A and C, Hygiene A, two years of college French, mathematics through solid geometry, plane trigonometry, and advanced algebra, and such other courses as may be recommended by the School of Architecture, a student may transfer without examination to the School of Architecture of Columbia University and become a candidate for the degree of Bachelor of Architecture. The course in the School of Architecture leading to this degree generally requires four years for its completion. As only a limited number of students can be accommodated, fulfillment of the requirements does not guarantee admission.

For full information, students are referred to the Announcement of the School of Architecture.

### Business

After two years of collegiate work in Barnard, amounting to at least 60 points' credit (exclusive of physical education), including English C and Hygiene A, two years of English, two years of French or German or Spanish or Italian, and one year of economics, a student may transfer without examination to the School of Business of Columbia University and become a candidate for the degree of Bachelor of Science. It is also recommended that a year of work in business administration and in economic geography be completed before transfer. The course in the School of Business leading to this degree generally requires for its completion two years in addition to the two years of collegiate work in Barnard College.

For full information, students are referred to the Announcement of the School of Business.

### Journalism

After two years of collegiate work in Barnard, amounting to at least 60 points' credit (exclusive of physical education), including English C and Hygiene A, two years of English with regular practice in writing, one year in natural science, two years of a modern language (preferably French) in advance of the intermediate admission requirement, government or economics (both are advised), and general European or American history (both are advised), a student may transfer without examination (except in typewriting) to the School of Journalism of Columbia University and become a candidate for the degree of Bachelor of Literature. The course in the School of Journalism leading to this degree requires for its completion two years in addition to the two years of collegiate work in Barnard College.

For full information, students are referred to the Announcement of the School of Journalism.

### Law

A limited number of specially qualified graduates of Barnard College are admitted to the School of Law of Columbia University. This School offers a three-year course leading to the degree of Bachelor of Laws.

For full information, students are referred to the Announcement of the School of Law.

### Medicine

After collegiate work of good grade at Barnard amounting to at least 72 points (exclusive of physical education) and including English C and Hygiene A, one year of physics based on entrance physics, one year of inorganic chemistry based on college entrance chemistry, one-half year of qualitative or quantitative analysis, one-half year of organic chemistry, one year of biology, two years of English, elementary and intermediate French or German or one year of French or German based on two years of entrance French or German, a student may be recommended by the Faculty of Barnard College for transfer without examination to the College of Physicians and Surgeons of Columbia University, to become a candidate for the degree of Doctor of Medicine. The course leading to this degree requires for its completion four years of study in the College of Physicians and Surgeons.

While the above courses represent the minimum requirements for admission, the authorities of the College of Physicians and Surgeons state that a collegiate course of four years leading to a Baccalaureate degree is considered the most desirable preparation. Because only a limited number of students can be accommodated, fulfillment of the requirements for entrance does not guarantee admission. The entire pre-medical record of each student is carefully examined in order that those who are adjudged most capable of meeting the exacting demands of the course and the profession of medicine may be selected.

The Barnard College regulations in regard to the amount of work which may be carried make it impossible for a student to complete the above minimum of 72 points in two years without summer session courses. The Barnard College Faculty also requires that all except students of very unusual ability take at least three years of pre-medical work before being recommended for transfer to the College of Physicians and Surgeons.

For full information, students are referred to the Announcement of the College of Physicians and Surgeons.

### Music

Courses in the history and theory of music and in composition, and a few courses in applied music, given at Columbia University, are open to regular students in Barnard College and may be credited toward the Barnard degree. They are described below in the departmental statement on page 112.

For full information, students are referred to the Announcement of the Department of Music.

Students wishing to combine collegiate work with vocal or instrumental training may, while pursuing courses at Barnard, enroll as regular students at the Institute of Musical Art, Claremont Avenue and 122d Street. These regular



courses include ear-training, theory and lectures. They must obtain the consent of the Dean of Barnard College and of the Director of the Institute. Work at the Institute will not be counted toward the Barnard degree and must be paid for separately.

#### Teachers College

Certain courses in the history and theory of education and in general methods for secondary schools are given by Teachers College to regular students in Barnard College and may be credited toward the Bachelor's degree. They are described in the departmental statement on page 90.

Though the other courses in Teachers College are intended primarily for graduate students, admission to some of the courses may be granted as a special privilege to seniors in Barnard College who show in their scholarship, personality, adaptability and leadership potential teaching power. Students who desire to take these courses in the senior year should apply at the Registrar's office in Barnard College before the preceding April 1 in order that their applications may be passed on by the Dean of Barnard College and the Director of the School of Education or the School of Practical Arts of Teachers College.

Regarding the requirements for the College Graduate Professional Provisional Certificate granted by the Regents of New York or for the position of "teacher in training" in the New York City high schools, students are advised to consult the Occupation Bureau at Barnard College.

#### Social Work

Exceptional advantages are available for students desiring to specialize in economics, sociology and social economy, in preparation for social and philanthropic work. Besides the courses given at Barnard in economics and social science, certain graduate courses in this department of Columbia University are open, with the consent of the department and of the Committee on Instruction, to specially qualified seniors. Through an arrangement with the New York School of Social Work, certain courses in the latter institution may also be pursued, with the consent of the Department of Economics and of the Committee on Instruction, and the approval of the Director of the School, by specially qualified seniors, and counted toward the Barnard degree. The purpose of this School is to fit men and women for social service in either professional or volunteer work. By taking some of this work in her senior year a Barnard student may anticipate part of the requirements for the diploma of the School of Social Work.

### GENERAL REGULATIONS REGARDING THE PROGRAM OF STUDIES, EXAMINATIONS IN COURSE, CREDIT AND ADVANCEMENT

**Election of Courses.** — Before final choice of elective studies, all students should consult their advisers (see page 66), the Committee on Instruction, and, in case of any doubt, the instructors in charge of particular courses as well. Electives must be chosen on some consistent plan. Conflicts between courses falling at the same hours are to be avoided by careful study of the Scheme of

Attendance at the end of this volume, which has been drawn up with a view to making possible for every one the selection of a reasonable number of harmonious elective courses that shall not conflict in hours with each other or with prescribed courses. It often happens that some of the courses of one department form valuable supplements to certain courses of another, so that combinations of work under two or more departments are very desirable. In all such cases the best selections can be made only after consultation with officers of one or more of the departments concerned. This applies particularly to the major subject (see page 55).

The following regulations should also be borne in mind:

1. No courses other than those specified in the Announcement may be taken except by students specially qualified to pursue them with advantage and with the consent of the Committee on Instruction.

2. No combination of courses amounting to less than 12 or more than 16 points may be made in any winter or in any spring session without the consent of the Committee on Instruction.

3. No credit will be given for a one-hour course, unless it is taken in connection with and as a supplement to a cognate course.

4. No more than four hours of class work, or its equivalent in laboratory work, or seven hours of class work and laboratory work combined, may be taken on the same day.

5. Tuesday at 1.10 p.m. is the Assembly hour. Academic meetings at which attendance is required are often held at this time, and all students are requested to keep it free for this purpose.

6. Students entering with advanced standing from other colleges will be required to take 12 points of their major at Barnard.

7. Of the points required for the degree, at least 30 must be taken while the student is registered in Barnard College, of which 30 points at least half should be taken during the senior year.

8. The election of courses under the graduate Faculties of Political Science, Philosophy, and Pure Science is restricted to specially qualified seniors, and in some cases juniors, and requires the consent of the head of the department concerned at Barnard, and of the Committee on Instruction. (For further details see page 59).

9. The election of specific courses in a summer session at Columbia University or elsewhere must be approved by the Committee on Instruction of Barnard College. No student who has received a grade of D or F during the preceding academic year will be allowed to count more than 6 points of work taken in a summer session, unless the Committee on Instruction shall otherwise decide. In no case may more than three courses or 8 points of work be counted in a summer session in any one year. No summer session course that is passed with a grade below C will be credited toward a Barnard degree.

If a student has taken work in a summer session without the previous approval of the Committee on Instruction, she should submit a report of her summer work within a month of her return to college, either in the winter or in the spring session. Otherwise no credit toward the Barnard degree will be allowed for the work that was taken.



10. Specific courses in University Extension may be credited toward the Bachelor's degree under the following regulations:

(a) The election of extension courses must be approved by the Committee on Instruction and by the Director of University Extension.

(b) Students will not be allowed to exceed a total of 16 points, including the points of extension courses, at one time, save with the special permission of the Committee on Instruction, for reasons of weight.

(c) Students desiring to count these courses toward the degree must obtain in them a grade of at least C.

**Time Limit for Counting Work Toward the Degree.** — All requirements for a degree must be fulfilled by the candidate within six years from the time of her first matriculation as a freshman in college, whether at Barnard or elsewhere; within four and a half years from similar matriculation as a sophomore; within three years from similar matriculation as a junior; and within one and a half years from similar matriculation as a senior. If the candidate fails to satisfy the requirements within the time here specified, she is to lose credit for all the points gained by her toward the degree unless, in individual cases, the Faculty shall otherwise direct.

**The Foreign Language Requirement.** — Every student will be allowed one trial a year, in February or in May, until the end of the junior year. A student who does not pass by the end of the junior year may present herself for another examination in September before the beginning of her senior year. If she fails to pass at that time, she will be suspended until the foreign language requirement is satisfied.

A transfer student will be urged to try the test on arrival. If she fails at that time, she will be ranked as unclassified with no promise as to when she may expect to complete the requirements for the degree.

**Change of Program.** — No change of program, either by adding or by dropping a course, may be made by a student without the written consent of the Committee on Instruction. Except on the initiative of the departments or of the Committee on Instruction, such change will be allowed *only in the ten days preceding the second Saturday of either the winter or the spring session*. (See also paragraph on fees, page 52.)

**Absences.** — All students are expected to attend regularly and promptly all the exercises in the courses for which they are registered. Any considerable amount of absence or tardiness will result in the lowering of a student's mark or the loss of one or more points of credit. At the end of each term each student may file in the Registrar's office, on blanks provided for that purpose, a list of her absences and tardinesses with the reasons therefor. After considering these excuses and the reports from the instructors, the Committee on Instruction will adjust marks and credits.

**Stated Examinations.** — Two series of examinations are held every year, one in January and the other in May. These are the only stated examinations. In 1930, the mid-year examinations begin on Wednesday, January 22, the final examinations on Monday, May 19.

**Special Examinations.** — Special examinations are held as follows: in the week beginning on the second Monday of the spring session of each year, and within the two weeks preceding the opening of the College in the fall.

Such examinations are open, by permission of the Committee on Instruction, to:

(a) Students who have received F (or D in excess of 6 points), provided that, in the opinion of the instructor and that of the Committee on Instruction, the term work has been good enough to make repetition in class or laboratory unnecessary. Ordinarily F (or D in excess of 6 points) in prescribed work involves repetition of the course.

(b) Students who have been absent, for imperative reasons, from the stated examination in any course provided their term work has been satisfactory.

(c) Other students, in rare instances, for reasons of weight.

In all cases application for permission to take a special examination must be made in writing.

For each and every examination taken at any time other than the stated examination period immediately following the conclusion of the course involved, a fee must be paid to the Bursar before the student is admitted to the examination (see page 53).

**Grades and Credit.** — The student's performance in a course is rated according to the following grades: A, excellent; B, good; C, fair; D, poor; F, failure. The mark *Incomplete* is given only when the student has obtained, in advance, the permission of the instructor to postpone for a short time the submission of certain outstanding term work which must be made up before a specific grade can be reported. Under the regulations of the Faculty, outstanding work that is not completed within 3 weeks after the end of the session automatically becomes an F.

No student may count for promotion from any class to the next higher class more than six (6) points of D work or may be credited with more than six (6) points of D work during her senior year. In case more than four years is required for her degree, not more than twenty-four (24) points of D work altogether may count for the degree. Of several courses in which a student is marked D she may choose the ones to be counted.

No student will be allowed to graduate on a record that is wholly of C grade or worse; therefore, unless a student does a reasonable amount of work of a grade better than C, she may be dropped from the roll of the College.

**Additional Credit for High Standing.** — At the end of the winter and of the spring session, when all the reports are filed in the Registrar's office, additional credit for high standing is given as follows:

The mark A in courses aggregating 6 points of work (no course to be counted twice) entitles the student to one point of extra credit, provided she has satisfactorily completed all the work of the session, and has not fallen below the mark B in any course.

**Classification of Students.** — Matriculated students whose record as to entrance conditions and the completion of prescribed work is satisfactory to the Committee on Instruction, are classified as follows:

Freshmen, those who have completed less than 24 points of academic work.

Sophomores, those who have completed 24 points.

Juniors, those who have completed 54 points.

Seniors, those who have completed 86 points.

In all cases the requirements for promotion must be met in full before the beginning of the winter session.



A student who fails to meet the requirements for advancement from one class to another may, with the consent of the Committee on Instruction, remain in College and repeat the course or courses in which her deficiency exists, or, in the case of elective courses, other courses equivalent thereto in time. She may not, however, register as a non-matriculant or as a special student.

Should a student fail of advancement in two successive years, she shall be permanently dismissed from the College, unless, for reasons of weight, the Committee on Instruction shall otherwise determine.

### ADVICE TO STUDENTS

The Dean is always glad to confer with a student regarding any matters that may be of interest to her. Individual instructors may also be consulted at any time by the student regarding her work in their classes.

Before planning her program for the coming year, every student should consult a member of the teaching staff, according to detailed regulations to be announced from time to time by the Committee on Instruction.

Not later than the spring session of her sophomore year, a student should consult the Occupation Bureau regarding opportunities in different occupations which may interest her and the prerequisites thereto.

### SCHOLARSHIPS

**Purpose.** — The College desires that no student of exceptional ability shall be kept away from Barnard because her family has only moderate means. In order to make it possible for such students to come, various scholarships have been established in the college, and there is also a loan fund administered by a competent Alumnae committee, and provision in the Occupation Bureau for enabling students to earn a little money to help pay some of their expenses.

When increasing the tuition fee for 1929-30 to a flat fee of \$380, the Trustees appropriated from the general funds of the College sufficient money to establish a considerable number of so-called "open scholarships" to meet the special needs caused by the additional cost of an education at Barnard.

**Number and Value.** — There are sixty-two endowed scholarships ranging in value from \$75 to \$700 a year, endowment funds providing supplementary grants varying from \$50 to \$300 each, and nine special funds for the benefit of students who need financial aid in emergencies. There are also the open scholarships supported from the general income of the College. Under certain circumstances, holders of scholarships which do not cover the entire tuition fee may receive supplementary grants from the funds.

**Conditions.** — All scholarships, except a few awarded on the nomination of outside organizations, are competitive, — that is, they are awarded by the Faculty Committee on Scholarships according to the scholarly ability, general character, and financial need of the applicants. Some are given to entering students for excellence in their entrance examinations and other credentials accepted for admission; others are awarded to students already in Barnard for excellence in their college work.

If a student fail to maintain a grade of at least C in all courses which she pursues, or if for any other reason she show herself an unsatisfactory candidate, she

shall forfeit her scholarship and shall be ineligible for re-election the following term. No student with entrance conditions unremoved, or with a grade below C in the term previous to that in which she is asking for help, shall be eligible for a scholarship. It is unlikely, however, that any student will receive a scholarship whose marks do not average B or better.

If a student reside outside Brooks Hall or Hewitt Hall, she shall not be eligble for an award greater than \$400 for any one academic year.

For some competitive entrance scholarships a complete set of entrance examinations under the College Entrance Board is required. For others, the New Plan of four comprehensive examinations is accepted. The entrance examinations should, as a rule, be taken in June, since the scholarships are generally awarded before the beginning of the Winter Session. If the candidate is offering a complete set of examinations, they may be divided between two successive Junes.

**Application.** — On or before the first of March of each year all applications for scholarships from students already in college, must be filed at the Dean's office upon special blanks to be obtained there. Candidates for the competitive scholarships to be awarded on the basis of the June examinations should, in their application to the Secretary of the College Entrance Examination Board (see p. 23), mention the Barnard scholarships for which they are competing. All applications from entering students must be made to the Secretary to the Committee on Admissions of Barnard College before the first of May. In order to qualify for the receipt of her stipend, the holder of a scholarship should report at the office of the Registrar not later than the first day of the academic year.

### OPEN SCHOLARSHIPS

Out of the general income of the College the Trustees have established these open scholarships in order to make it possible for families of moderate means, especially in the professional classes, to send their daughters to Barnard. They are of the following types:

1. Scholarships of a value of \$500 a year for students residing in Brooks or Hewitt Hall, awarded on the merit of the student's entrance record, if she is entering as a freshman, or on her record at her former college, if she is transferring to Barnard from another institution. They may be held for one year, provided the student maintains a satisfactory record, and at the end of this year, if her general standing warrants, she will receive further scholarship aid.

2. Scholarships of \$300 a year each, for students not living at the College. They will be awarded and held under the same conditions as those described above.

3. Grants ranging from \$25 to \$400, which will be awarded to students of scholarly ability and promise in order to meet their special financial needs.

### COMPETITIVE ENTRANCE SCHOLARSHIPS

These, subject to the foregoing general regulations for scholarships, are as follows:

\* Brooklyn Scholarships (\$150 each) . . . . . 12

Founded in 1895 by the Trustees of Columbia University in recognition of the gift to Columbia University by President Low of a memorial

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\* Open to freshmen.



building for the University Library. They are open to students who have received their training in either the public or the private schools of Brooklyn, N. Y., and are residents of that city. Three of these scholarships will be awarded annually to qualified competitors who pass in June without conditions the best entrance examinations. They may be held for the entire college course, but a holder, while retaining the title 'Brooklyn Scholar,' may transfer the income to any properly qualified candidate from Brooklyn without having her action made a matter of public record.

\* Carpentier Residence Scholarships (for annual income, see below) . . . 8

Founded in 1919 with a bequest from the late Horace W. Carpentier.

Eight Residence Scholarships, four of which carry an income of \$700 a year apiece, beginning in 1926, and four an income of \$400, are open to women who are not residents of New York City or its vicinity. They are awarded on the merits of entrance examinations taken under the College Entrance Examination Board and on the candidates' general character and power of leadership. The examinations may be taken, if the candidates so desire, in two successive Junes. The scholarships may be held throughout the college course, provided the recipients continue to maintain a high rank in their college work. The holders are required to reside in Brooks Hall, or Hewitt Hall, the Barnard halls of residence. One of each will be awarded each year.

\* Lucille Pulitzer Scholarships (for annual income, see below) . . . . . 14

Founded by the late Joseph Pulitzer in memory of his daughter, Lucille Pulitzer.

Eight Residence Scholarships, four of which carry an income of \$700 a year apiece, beginning in 1926, and four an income of \$300, are open to women who are not residents of New York City or its vicinity. They are awarded on the same terms as the Carpentier Residence Scholarships listed above. One \$700 and one \$300 scholarship will be awarded each year.

Three New York City Scholarships are awarded to students entering the College from the city of New York who are found to have passed excellent entrance examinations and to be worthy of financial aid. They may be held for the first three years of the college course only.

The first (a), founded in 1899, carries an annual income of \$400 and will be awarded in 1930, 1933, and corresponding years.

The second and third, given in 1903, carry annual incomes of \$325 each; (b) will be awarded in 1931 and 1934, (c) in 1929 and 1932, and corresponding years.

One Competitive Freshman Scholarship (\$300) is awarded annually on the merits of the entrance examinations and on the candidate's general character. It may be held for one year only.

Two Scholarships (\$200 each) may be awarded to students of any

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\* Open to freshmen.

class who have shown exceptional scholarly ability and who are in need of assistance.

\* Jessie Kaufmann Scholarship . . . . . 1

The income of a fund of \$4,000.

Founded in 1902 by Mr. Julius Kaufmann in memory of his daughter, Jessie Kaufmann. Awarded on the merits of the entrance examinations to a student who, after careful investigation, is found to have no relative able to assist her financially. It may be held for the entire college course.

Martha T. Fiske Scholarship . . . . . 1

The income of a fund of \$5,000.

Founded in 1911 by Miss Anna E. Smith, in memory of her sister, Mrs. Martha T. Fiske-Collord. It is awarded, on the basis of scholarly ability and general character, to some deserving candidate not a resident of New York City or its suburbs, and may be held throughout the college course, provided the recipient continues to maintain a satisfactory standing.

GENERAL SCHOLARSHIPS

These, subject to the general regulations for scholarships, are as follows:

Ella Weed Scholarship . . . . . 1

The income of a fund of \$3,000.

Founded in 1895 by the pupils of Miss Anne Brown's School in memory of Miss Ella Weed, who was chairman of the Academic Committee of the Board of Trustees of Barnard College during the first five years of its existence.

Veltin School Scholarship . . . . . 1

The income of a fund of \$3,000.

Founded in 1905 by the alumnae of Mlle. Veltin's School.

Jennie B. Clarkson Scholarship . . . . . 1

The income of a fund of \$3,000.

Founded in 1898 by the late Mrs. W. R. Clarkson.

Emily James Smith Scholarship . . . . . 1

The income of a fund of \$3,000.

Founded in 1899 by the late Miss Emily H. Bourne in honor of Miss Smith, then Dean of Barnard College.

Anna E. Barnard Scholarship . . . . . 1

The income of a fund of \$3,000.

Founded in 1899 by the late Miss Emily H. Bourne in honor of Mrs. John G. Barnard.

\* Open to freshmen.



- Brearley School Scholarship . . . . . 1  
 The income of a fund of \$3,000.  
 Founded in 1899 by pupils and former pupils of the Brearley School.
- Eliza Taylor Chisholm Memorial Scholarship. . . . . 1  
 The income of a fund of \$3,000.  
 Founded in 1901 by the Alumnae Association of Miss Chisholm's School, which Association reserves the privilege of precedence for such candidates as it may recommend.
- Graham School Scholarship . . . . . 1  
 The income of a fund of \$3,000.  
 Founded in 1907 by the Graham Alumnae Association.
- Mrs. Donald McLean Scholarship. . . . . 1  
 The income of a fund of \$3,000.  
 Founded in 1906 by the New York Chapter of the Daughters of the American Revolution. It is awarded, in conference with a representative of the Chapter, to a deserving student who agrees to pursue the study of history (chiefly that of the United States) continuously throughout her college course.
- Emma Hertzog Scholarship . . . . . 1  
 The income of a fund of \$3,000.  
 Founded in 1904 by gifts from residents of Yonkers, N.Y. It is awarded, in conference with the faculty of the Yonkers High School, to a graduate of that school who is entering Barnard College.
- Mrs. Henry Clarke Coe Scholarship. . . . . 1  
 The income of a fund of \$3,600.  
 Founded in 1910 by the National Society of New England Women, now the New York City Colony of the National Society. It is awarded, on the nomination of the chairman of the Scholarship Committee of the New York City Colony, to a student from New England or of New England parentage, and after the award is once made the Society requires from the beneficiary full obedience to discipline and the highest ideals of scholarship. This may be awarded to an entering freshman.
- Eleonora Kinnicutt Scholarship. . . . . 1  
 The income of a fund of \$5,000.  
 Founded in 1911 in memory of Mrs. Francis P. Kinnicutt, who was a Trustee of Barnard College. It is awarded at the end of the freshman year to a student of exceptionally high standing, and may be held for three years, provided the recipient continues to maintain a high rank. It will be awarded in 1930 and 1933.

- Emma A. Tillotson Scholarship . . . . . 1
- The income of a fund of \$5,000.
- Founded in 1910 by the late Mrs. Luther G. Tillotson. It is awarded at the end of the freshman year to a student of exceptionally high standing, and may be held for three years, provided the recipient continues to maintain a high rank. It will be awarded in 1931 and 1934.
- William Moir Scholarships . . . . . 2
- The income of a fund of \$10,000.
- Founded in 1912 by the late Mrs. William Moir, in memory of her husband.
- The first (a) is awarded at the end of the freshman year to a student of exceptionally high standing who is in need of assistance, and may be held for three years, provided the recipient continues to maintain a high rank. It will be awarded in 1929 and 1932.
- The second (b) may be awarded to a student of any class who has shown exceptional scholarly ability and who is in need of assistance.
- Mary Barstow Pope Scholarship . . . . . 1
- The income of a fund of \$4,000.
- Founded in 1913 in memory of Mary Barstow Pope, sometime teacher in Miss Chapin's School, by her friends, her fellow-teachers, and her pupils. It is open to any undergraduate of Barnard College for the whole or any part of her course, and is awarded on the nomination of a self-perpetuating committee representing the founders.
- Charles E. Bogert Memorial Scholarship, and  
Anna Shippen Young Bogert Memorial Scholarship . . . . . 2
- The income of a fund of \$10,000.
- Founded in 1913 with a bequest from the late Annie P. Burgess. They are awarded to worthy and deserving students of good Christian character who are unable to pay their own expenses.
- Martha Ornstein Brenner Scholarship . . . . . 1
- The income of a fund of \$4,000.
- Founded in 1915 by her friends in memory of Martha Ornstein Brenner, 1899.
- Barnard School Alumnae Scholarship . . . . . 1
- The income of a fund of \$4,000.
- Founded in 1916 by the alumnae of the Barnard School for Girls. It may be awarded to a student in any class, preference being given to nominees of the school.
- Fanny I. Helmuth Scholarship (at least \$262) . . . . . 1
- Established on a temporary basis by the Daughters of Holland Dames in honor of Fanny I. Helmuth. It is awarded in conference with a representative of the society to a student of Dutch descent who is in need of aid.



Anna M. Sandham Scholarship. . . . .	1
The income of a fund of \$10,000.	
Founded in 1922 with a bequest from the late Anna M. Sandham.	
Eleanor Butler Sanders Scholarship . . . . .	1
The income from a fund of \$10,000.	
Founded in 1922 with a bequest from the late Henry M. Sanders.	
Scholarship in English. . . . .	1
The income of a fund of \$5,000.	
Founded in 1920 by an anonymous donor. It is awarded to a student of good standing who is specializing in English and is in need of help; with the proviso that, if in any year there is no student specializing in English who stands out as particularly deserving of aid, the scholarship may be used, at the discretion of the Faculty Committee on Scholarships, to assist a student majoring in some other subject.	
Lucille Pulitzer Supplementary Scholarships (\$50 each) . . . . .	44
Founded by the late Joseph Pulitzer in memory of his daughter, Lucille Pulitzer. They are awarded to worthy and needy students, and may be used to supplement larger scholarships or themselves combined into scholarships of \$100 or more. The money is applicable to tuition fees, residence fees, or, in special cases, general outside expenses.	
Augusta Larned Scholarship . . . . .	1
The income of a fund of \$10,000.	
Founded in 1924 with a bequest from the late Augusta Larned.	
Mary E. Larkin Joline Scholarship . . . . .	1
With an annual value of \$300.	
Founded in 1927 with a bequest from the late Mary E. Larkin Joline.	
It is awarded to a student who is specializing in music.	
Charlotte Louise Jackson Scholarship . . . . .	1
The income of a fund of \$5,000.	
Founded in 1928 with a bequest from the late Fannie A. Jackson.	
It is awarded to a graduate of a Yonkers high school selected by or under the direction of the Board of Education of Yonkers.	

#### SPECIAL FUNDS FOR THE AID OF NEEDY AND DESERVING STUDENTS

##### Arthur Brooks Fund.

A fund of \$5,000, given in 1897 by Miss Olivia E. Phelps Stokes as a memorial to the Reverend Arthur Brooks, D.D., Rector of the Church of the Incarnation and Chairman of the Board of Trustees of Barnard College during the first six years of its existence.

**Fiske Scholarship Fund.**

A fund of \$5,000, given by the late Mrs. Martha T. Fiske-Collord, the income of which is placed at the disposal of the Dean of Barnard College.

**George W. Smith Scholarship Fund.**

A fund of \$5,000, given in 1906 by the late Mrs. Martha T. Fiske-Collord as a memorial to Mr. George W. Smith, who was a Trustee of Barnard College. The income of the fund is placed at the disposal of the Dean of the College.

**Charles Stewart Smith Scholarship Fund.**

Established in 1911 in memory of the late Charles Stewart Smith, who was a Trustee of Barnard College. It provides an annual income of \$250, which is used to assist needy and deserving students.

**Mary Gertrude Edson Aldrich Scholarship Fund.**

A fund of \$1,000, given by Mrs. James Herman Aldrich. The income is used to assist in her senior year a student who has shown in her college life the moral qualities which go to the making of fine womanhood.

**Scholarship Fund.**

A fund of \$9,680, established by general subscription through the Scholarship Committee of the Board of Trustees.

**Carpentier Scholarship Fund.**

A fund of \$200,000, the bequest of the late Horace W. Carpentier. The income remaining after the payment of the Carpentier Residence Scholarships described on page 66 is placed at the disposal of the Dean for distribution in scholarships of varying amounts, according to the needs of deserving students.

**Caroline Church Murray Fund.**

A fund of \$5,000, established in 1918 by George Welwood Murray in memory of Caroline Church Murray. The income is placed at the disposal of the Dean, to be used in aid of needy and deserving students.

**Irma Alexander Goldfrank Fund.**

A fund of \$2,105, established in 1919 by the friends of the late Irma Alexander Goldfrank, 1908. The income is placed at the disposal of the Dean, to be used in aid of needy and deserving students.

**Alumnae Scholarship Fund.**

A fund of approximately \$1,400 established by the Class of 1912 at its Tenth Reunion, and subsequently increased by a legacy from the estate of Julia Ludlow Young, an alumna. The income is to be used to help needy and deserving students.

**Thomas F. Clark Students' Loan Fund.**

A fund of \$100,000, the bequest of the late Mrs. Fanny Foster Clark. The income is to be used to aid needy and deserving students.



#### Edna Henry Bennett Memorial Scholarship Fund.

A fund of \$1,630, established in 1927 by friends of the late Edna Henry Bennett, 1915, Lecturer in Zoölogy. The income is to be awarded by the Department of Zoölogy to Barnard students for work at the Marine Biological Laboratory, Woods Hole, Massachusetts.

### STUDENTS' LOAN FUND

A Students' Loan Fund of \$12,000 is maintained by the Associate Alumnae. From this fund loans are made at a low rate of interest to students in need of financial assistance, whether for college tuition and residence fees or for outside expenses. The loans and interest are to be repaid within seven years after graduation. Under the rules of the Students' Loan Committee, no money may be granted to a freshman in her first winter or spring session; it may be granted in the second only in exceptional cases. The chairman of the Committee, to whom inquiries should be addressed, is Miss Louise Odencrantz, 301 West 22d Street, New York City.

The operation of this fund as a loan fund, as distinct from the special scholarship funds already mentioned, makes it possible to keep the capital in continuous use by successive generations of students. While the Committee does not deem it advisable to lend a very large amount to any one student, it has not found that loans of moderate size prove a burden on the borrowers. The Committee desires to make the fund as helpful as possible and wishes therefore to have students in need of assistance apply to it freely.

### CAROLINE DUROR MEMORIAL GRADUATE FELLOWSHIP

Established by an anonymous donor in 1912. It is of an annual value of \$600. The holder is to pursue a year of graduate study at Columbia or any other university or college of approved standing. This fellowship is awarded each year as an academic honor to that member of the graduating class of Barnard College, who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which will then be used for other fellowships or scholarships. This Fellowship is not to be applied for, but is awarded each year as soon as possible after the mid-year examinations. Students who have graduated in February are eligible, as well as those who are to graduate in June.

### MARGARET MEYER GRADUATE SCHOLARSHIP

An annual graduate scholarship of a value of \$75, established by Mrs. Alfred Meyer in 1923 in memory of Margaret Meyer Cohen of the Class of 1915, awarded annually to a member of the graduating class for training in secretarial work.

## PRIZES

The following prizes are awarded annually, on the recommendation of the appropriate departments of the Faculty of Barnard College, in accordance with the special conditions named below. No prize will be awarded to any student who falls below grade C in any course during the year in which she is a competitor.

**Herrman Botanical Prize.** — A prize consisting of the income of a fund of \$1,000, founded by the late Mrs. Esther Herrman, is awarded annually to the most proficient undergraduate student in botany.

**Kohn Mathematical Prize.** — A prize consisting of the income of a fund of \$1,000, founded by Mrs. S. H. Kohn, is awarded annually to a senior for excellence in mathematics. Competitors for this prize must have pursued mathematics continuously during their college course.

**The Jenny A. Gerard Medal.** — The Jenny A. Gerard Gold Medal, given in 1908 by the Society of the Colonial Dames in America in memory of Mrs. James Gerard, late President of the Society, is awarded annually to the undergraduate student of American birth in Barnard College who is most proficient in American Colonial History.

**Speranza Prize in Italian.** — A prize consisting of the income of a fund of \$1,000, founded by a former student in memory of the late Carlo Leonardo Speranza, Instructor and Professor of Italian at Barnard from 1890 until 1911, is awarded annually to a student in Barnard College for excellence in Italian.

**von Wahl Prize.** — A prize consisting of the income of a fund of \$1,300, founded in 1915 in memory of Constance von Wahl, 1912, President of the Undergraduate Association, is awarded annually to a student for excellence in zoölogy, on the understanding that it is to be used to advance her knowledge in that field. If in any year no student stands out as eminently deserving of the prize, it is not awarded.

**Caroline Gallup Reed Prize.** — A prize consisting of the income of a fund of \$1,000, founded in 1916 by Mrs. William Barclay Parsons in memory of her mother, Mrs. Sylvanus Reed, for the recognition of special study in the subject of the origin of christianity and early church history, is awarded annually to the student who shows the highest excellence in this field of work. The award is made partly on the basis of an examination and partly on the basis of an essay to be handed in by May 1. A syllabus of the period to be covered may be obtained from the Chaplain of the University.

**Jean Willard Tatlock Memorial Prize.** — A prize consisting of the income of a fund of \$1,250, founded in 1917 by her friends in memory of Jean Willard Tatlock, 1895, is awarded annually to the undergraduate student most proficient in Latin.



**The Helen Prince Memorial Prize.** — A prize consisting of the income of \$1,200, founded in 1921 by Mr. Julius Prince in memory of his daughter, Helen C. Prince, of the Class of 1922, is awarded annually to an undergraduate student in Barnard College for excellence in dramatic composition.

**Dean Prize in German.** — A prize consisting of the income of \$1,000, one-fifth of a fund of \$5,000 established in 1925 by Mr. Edward D. Adams for the promotion of the study of German language and literature in Barnard College, is awarded annually to that member of the senior class at graduation who has throughout her course done the best work in the German language and literature.

The following prizes of Columbia University are by their terms open to students of Barnard College:

**Bennett Prize.** — A prize established through a gift of \$1,000 from James Gordon Bennett may be awarded by the Faculty of Political Science for the best essay upon some subject of contemporary interest in the domestic or foreign policy of the United States. The competition is open to students not holding a baccalaureate degree who pursue courses amounting to six hours a week in the School of Political Science. The subject for the essay to be handed in May 1, 1930, is: 1. "The Policy of the United States toward Russia 1917-1928." 2. "A Comparison of the Budget System of New York City with that of London."

**The Bunner Medal.** — The H. C. Bunner Gold Medal, established by the friends of the late Henry Cuyler Bunner, is awarded annually at Commencement to the candidate for a Columbia degree who shall present the best essay on an assigned subject in American literature. The award will be made by a committee to be appointed by the President. The subject for the essay to be handed in May 1, 1930, is "New York City in Early American Fiction."

**Earle Prize in Classics.** — A prize of \$50, established in memory of Mortimer Lamson Earle, Instructor in Greek in Barnard College from 1889 to 1895 and from 1898 to 1900, and Professor of Classical Philology from 1900 to 1905, is open for annual competition to all candidates for the degree of Bachelor of Arts. It is awarded partly on the basis of the regular work of the year in Greek and in Latin, partly on the basis of a special examination. The special examination covers specified portions of Greek and Latin literature, sight reading in Greek and in Latin, and prose composition in Greek and in Latin. The special subjects for 1930 are Vergil, *Aeneid*, Book XII, Sidgwick's Edition Demosthenes, *Olynthiacs*, Sandy's Edition.

For the award in 1930, the examination will be held in January. Students are urged to do much of their work for the examination during the preceding summer vacation.

**The Caroline Phelps Stokes Prize.** — The Caroline Phelps Stokes Prize of \$40 is awarded annually at Commencement to that student who, having been regularly enrolled in Columbia College or Barnard College or Teachers College

as a candidate for an academic degree, for not less than two sessions, winter or spring, shall be deemed to have written the best essay upon an assigned topic bearing upon the rights of man. The subject for the essay to be handed in May 1, 1930, is: 1. "The Right and Desirability of Congress to Declare War *versus* The Right and Desirability of the People to Declare War." 2. "The Right and Desirability of the Government to Censor Theatrical Productions."

**Greek Prizes.** — Two Prizes, aggregating \$100, are awarded annually at Commencement to those students passing the best entrance examination in three years of Greek combined with the subsequent curricular Greek in the freshman year.

## RESIDENCE HALLS

Brooks Hall and Hewitt Hall (see p. 15), the residence halls for Barnard College students, will open on Friday, September 20, 1929, and will close on Saturday, June 7, 1930. Candidates for admission or students who wish to secure accommodations in the halls during the week of the June entrance examinations or the September entrance or deficiency examinations should make arrangements directly with the Assistant to the Dean in charge of Residence Halls, not later than June 1 or September 1, respectively.

Full information in regard to the situation and cost of rooms and the advance deposit is published in a separate pamphlet, to be had on application to the Assistant to the Dean in charge of Residence Halls. All correspondence regarding accommodations in the Halls should be addressed to the Assistant to the Dean in charge of Residence Halls, Barnard College, New York, N.Y. All checks and money orders should be made payable to the order of Barnard College. For the dormitory fees see page 54.

The post-office address for resident students is Brooks Hall, 3001 Broadway, New York, N.Y.

For regulations in regard to the residence of students who do not live in Brooks Hall or in Hewitt Hall, see page 16.

## HEALTH AND PHYSICAL EDUCATION

The University Medical Officer, Dr. William H. McCastline, the College Physician, Dr. Gulielma F. Alsop, and the Head of the Department of Physical Education, Prof. Agnes R. Wayman, by means of lectures, required exercise adapted to the needs and condition of the individual, and personal advice endeavor to promote the health of the students. The sanitation of the college is under their supervision. Assistant physicians, two trained nurses and six instructors work under their direction.

Barnard Hall contains a gymnasium, swimming pool, and exercise rooms. The students have also, on Milbank Quadrangle, tennis courts and a practice field for games. Three hand ball courts have been constructed on the roof of the building, which is also provided with equipment for "moderate" games for the students physically unable to take part in more strenuous activities. Two rest rooms are reserved for the use of the students.



A physical and medical examination is required of each student upon entrance, and at the end of the first year and the fourth year. Frequent medical inspections are given each student. These examinations plus a motor ability test are made the basis for determining the type of physical exercise a student should take. Special remedial and corrective classes are provided for students requiring special individual attention. When necessary, recommendations are made to the Committee on Instruction regarding the student's academic program. As far as possible the work in the Department of Physical Education is conducted in the open air.

## THE UNIVERSITY LIBRARY

The General Library of the University contains about 1,132,236 volumes, exclusive of unbound pamphlets and doctoral dissertations. The various departments of instruction have also special libraries in connection with their lecture-rooms and laboratories. The Avery Architectural Library, the Law Library, the Ella Weed Library of Barnard College, the Bryson Library of Teachers College, and the libraries of the College of Physicians and Surgeons and the College of Pharmacy, are all available to students of the University.

For the convenience of the undergraduates of Barnard College there is maintained in the Ella Weed Library in Barnard Hall a carefully selected collection of reference books of about 30,000 volumes.

## UNIVERSITY PRESS BOOKSTORE

A University bookstore is maintained in the building of the School of Journalism under the auspices of the Columbia University Press, where officers and students may purchase books and stationery at stated discounts from list prices.

## ASSEMBLY AND CHAPEL

University or College assembly is held Tuesdays at 1:10 o'clock. All students are expected to attend.

In St. Paul's Chapel, the chapel of Columbia University, service is held every week-day except Saturday at 12 o'clock and on Sunday afternoon at 4 o'clock. At these services attendance is voluntary.

A special University service is held in St. Paul's Chapel on the Tuesday preceding the Thanksgiving recess.

## OCCUPATION BUREAU

The Occupation Bureau registers alumnae and students in search of employment or professional advancement and recommends them to employers who apply to the College.

In general, students are not advised to undertake employment during their first winter or spring session in college, since it is difficult for them to estimate at first the amount of time that can safely be spared from academic work. That is, the College prefers that they do not enter until they have funds available for

the first year's expenses. After the first session or first year an able student in good health can usually arrange to spare three or four half-days a week, and can earn a part of her expenses. Summer work may also be obtained. Most unskilled student work is, however, paid at a low rate. No student who carries a full course can expect to earn all of her expenses, both tuition and living.

Both students and graduates are given as much information as possible about opportunities in different lines of work and the requirements therefor. For each student a personal record including scholastic achievement, rating in the entrance psychological test, extra-curricular interests, vocational interests and experiences, etc., is kept in this office, in order that the vocational information given may be as helpful as possible. The Vocational Advisory Committee of the Associate Alumnae coöperates with the Bureau; and members of the Faculty assist students with information in regard to particular vocations.

The College keeps in touch with the Personal Research Federation and the Coöperative Bureau for Women Teachers, both of New York City, of which it is a contributing member, and utilizes the information collected by them.

## STUDENT ORGANIZATIONS

Under the system of self-government in use in the College, the various student organizations are supervised by the Student Council and the Representative Assembly, subject to the general approval of the Faculty. The Student Council also administers the Honor Code, in accordance with which all students on entering Barnard College agree to maintain a high standard of honor in examinations and all phases of college life.

Every regular or unclassified student is a member also of the Undergraduate Association and as such is at liberty, on payment of the student fee, to take part in all general undergraduate and class functions, to make use of all privileges of the Athletic Association, and to receive the College weekly paper and literary quarterly. Special students may become special and associate members of the association, if they so desire.



STATISTICS

	1889	1894	1899	1904	1909	1914	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to
	1890	1895	1900	1905	1910	1915	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	
UNDERGRADUATES, REGULAR:																	
Seniors . . . . .	..	9	40	83	62	*123	87	103	*72	*95	*107	*126	155	*175	*143	*192	
Juniors . . . . .	..	18	40	71	122	110	190	187	203	219	256	259	269	258	304	318	
Sophomores . . . . .	..	18	37	75	109	191	193	174	173	168	192	234	228	245	253	244	
Freshmen (regular) . . . . .	4	26	54	110	188	240	224	222	220	270	296	271	316	313	304	314	
Freshmen (partly regular) . . . . .	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Unclassified students . . . . .	..	..	..	..	..	..	..	..	..	37	59	57	44	60	45	48	
	14	71	171	339	481	664	694	686	668	789	910	947	1011	1051	1049	1116	
SPECIAL STUDENTS:																	
Matriculated . . . . .	..	..	21	27	24	32	39	40	41	..	39	33	37	35	24	30	
Non-matriculated . . . . .	..	..	..	..	30	32	22	22	26	33	..	..	..	..	..	..	
Departmental (1889-1896) . . . . .	22	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Music students (1896-1904, 1914-1915) . . . . .	..	..	41	..	..	5	..	..	..	..	..	..	..	..	..	..	
	22	29	62	27	54	69	61	62	67	33	39	33	37	35	24	30	
GRADUATE STUDENTS (1890-1900) . . . . .	..	19	82	..	..	..	..	..	..	..	..	..	..	..	..	..	
TOTAL STUDENTS PRIMARILY REGISTERED AT BARNARD . . . . .	36	119	315	366	535	733	755	748	735	822	949	980	1049	1086	1073	1146	
STUDENTS FROM COLUMBIA UNIVERSITY . . . . .	..	..	18	62	59	28	80	59	*62	61	113	153	128	93	152	116	
STUDENTS FROM TEACHERS COLLEGE . . . . .	..	..	..	77	200	*108	38	22	31	42	54	50	49	43	42	30	
STUDENTS FROM SCHOOL OF PHILANTHROPY . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
TOTAL STUDENTS FROM OTHER PARTS OF THE UNIVERSITY . . . . .	..	..	18	139	259	136	118	81	93	103	167	203	177	136	194	146	
	36	119	333	505	794	869	873	829	828	925	1116	1183	1226	1222	1267	1292	
TOTAL REGISTRATION DEGREES CONFERRED:																	
A.B. . . . .	..	8	39	83	88	141	139	168	151	157	177	198	212	250	190	..	
B.S. . . . .	..	..	18	..	2	8	5	2	1	..	..	..	..	..	..	..	
A.M. (1894-1900) . . . . .	..	1	18	..	..	..	..	..	..	..	..	..	..	..	..	..	
Ph.D. (1895-1900) . . . . .	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	

TOTAL BACHELORS' DEGREES CONFERRED 1893-1928: A.B., 3764; B.S., 77.  
\* The figures for seniors include students counting the first year in a professional school of the University in place of the fourth year at Barnard as follows:

1914-15	3 in Education
1921-22	1 in Journalism
1922-23	1 in Journalism
1923-24	2 in Journalism, 1 in Medicine
1924-25	1 in Medicine
1926-27	2 in Medicine
1927-28	1 in Architecture, 1 in Business, 2 in Journalism
1928-29	1 in Architecture, 1 in Journalism

## DEPARTMENTAL STATEMENTS

*The following general regulations apply to all courses. The paragraphs on "The Program of Studies," pp. 54-56, should be carefully read.*

Admission to courses depends upon completion of the prerequisites as stated for each course. In all cases the requirements as to prerequisites for any course must be completed before the beginning of the winter or of the spring session in which the course is given. Where no prerequisite is stated and where no limitation is noted, the course may be taken for a degree by any student of the college.

When an announced course has not been applied for by at least three candidates for a degree, the instructor may withdraw it.

Where the hours for laboratory work are not given either in the departmental statement or in the scheme of attendance, they must be arranged after consultation with the officer in charge of the course.

Courses designated by capital letters are prescribed. Elective courses are designated by numbers, odd numbers indicating the winter session, and even numbers the spring session. A compound course is therefore designated by an odd number and the succeeding even number. The numbers from 1 to 99 inclusive are given to courses open only to undergraduates; the numbers from 101 to 199 inclusive are given to courses open to both undergraduates and graduates, the lower numbers in each case being used for the introductory courses.

A Roman numeral in parentheses after the hour indicates the section number (*e.g.*, M., W. and F. at 9 (I), at 10 (II), etc.).

In the statement of each course the prerequisites are indicated. When no department is named, it is to be assumed that the reference is to a numbered course in the same department. *No credit in points will be given for a course which is taken subsequent to the course or courses for which it is in any way a prerequisite, though not formally so announced. Courses must be taken for the credit value announced — for no more or no less.*

A hyphenated course (*e.g.*, History 1-2) is regarded as a full-year course, of which the first half is always assumed to be a prerequisite for admission to the second half, and, except for reasons of weight, and with the written consent of the instructor, no credit will be given for work dropped at the mid-year or before the completion of the course. A course of which the index signs are separated by a comma (*e.g.*, English 3, 4) is regarded as a divisible course of which the first half may be taken separately. *Admission to the second half of a divisible course is granted only when all prerequisites have been met and the written consent of the instructor obtained.*

Courses marked with an asterisk (\*) are given at Columbia University (Cf. p. 59).

Courses marked with a dagger (†) are given at Teachers College. *Work at Teachers College mentioned herein may be pursued only by regularly enrolled students of Barnard College and only when counting for a Barnard College degree.*



*Certain courses not here specified as being open at Teachers College may, through the courtesy of Teachers College and with the consent of the Committee on Instruction, be taken by such students.*

For further detailed information in regard to topics, text-books, or methods in any particular course students are referred to the instructors.

## ANTHROPOLOGY

*A major in Anthropology will satisfy the requirement in Group III. Students majoring in this subject must satisfy the 14-point requirement in Group II in subjects other than anthropology. For other students, beginning with the Class of 1932, courses in anthropology will count toward the group requirement as indicated by the numerals printed after the point value for each course.*

**A major in Anthropology.** — Students majoring in anthropology will be required to take in

**Anthropology** — Courses 1, 2, or 3, 4.

**Other fields** — A reading knowledge of German and courses which will vary with the special interest of the student and must be arranged in consultation with the major department.

**Honors Course** (see page 57). — Candidates for a degree with honors will be required to submit a paper which is the result of research in some special subject. The comprehensive examination will include a knowledge of anthropological problems, theories and methods. Required courses will differ for individual students but the following are suggested: a reading knowledge of French and German; fundamentals of natural sciences or social sciences, or both; mathematics, preferably through integral calculus.

**1, 2** — Introduction to historical anthropology. Professor REICHARD. 8 points in Group III.

M., W. and F. at 1, and weekly visits to the American Museum of Natural History at hours to be arranged. Students who have taken either Course 1, 2 or Course 3, 4 need not repeat the Museum work for the second course but may satisfy the fourth point by reading and research.

Open to all excepting freshmen. Either half of this course may be taken separately.

The early history of mankind; the antiquity of man; the races of man; the distribution of languages; the independent development in the new world and the old; characterization of the tribes of Africa, Australia, Polynesia, Asia, prehistoric Europe and America.

Courses 1, 2 and 3, 4 are ordinarily given in alternate years.

**[3, 4** — Introduction to comparative anthropology. Professor REICHARD. 8 points in Group II.

Open to all excepting freshmen. Either half of this course may be taken separately.

The relation between race and mental faculties; the characteristics of languages; cultural types and areas; historical influences determining cultural development; the growth of civilization; the historical development of industries, forms of art, society and religion. The application of anthropological data to modern social problems; the development of reason; the emotional attitudes determining behavior; the influences of patterns determining lines of thought and action; the individual and society.

*Not given in 1929-30.]*

**6** — Language and thought. Professor REICHARD. 2 points in Group I.

Tu. and Th. at 2.

Open to all excepting freshmen.

Relationship between language, race and culture; phonetics; grammatical processes and categories; thought categories; types of languages; value of linguistics in anthropological research. All of these subjects will be treated with special reference to the languages of primitive peoples.

**[107 — Traditional literature. Professor REICHARD. 3 points in Group I.**

Open to juniors and seniors.

Primitive literature in the old and new worlds. Form and content of tradition: the proverb, riddle, folk tale, myth, fairy-tale, romance, adventure, novel, verse and song. Types of character and plot. Mythological styles defined.

This course aims to acquaint students with valuable material which is not generally known, rather than to develop mythological theories, although the latter will be briefly discussed.

*Not given in 1929-30.]*

**[108 — The art of primitive man. Professor REICHARD. 3 points in Group I.**

Open to juniors and seniors.

Control of technique; geometrical and representative design. Art of various groups defined. A study of proportion, of design, line and mass; of rhythm, symmetry and balance; of color. The attitude of the artist and of the social group. Primitive architecture. Theories of art.

*Not given in 1929-30.]*

**109 — Primitive social life. Professor REICHARD. 3 points in Group III.**

M., W. and F. at 11.

Open to juniors and seniors.

The organization of the family, sib, totem and association; kinship and marriage customs; rank, property, wealth, inheritance, position of women, education; birth, puberty and funeral customs; political organization; the relation of the individual to his environment and comparisons between modern and primitive societies.

**110 — Man and the supernatural. Professor REICHARD. 3 points in Group III.**

M., W. and F. at 11.

Open to juniors and seniors.

Primitive religion: questions of taboo, ancestor worship, the fetish, animism, shamanism, the vision, priesthood and witchcraft; deities, sacrifice and ceremonialism. Rationalistic and emotional factors in religious life. The relation of religion to other phases of culture. Theories of origins and development.

More advanced courses given at Columbia University are described in the Announcement of the Division of Philosophy, Psychology and Anthropology.

## ASTRONOMY

**[\*1 — General introductory course. 3 points.**

*Not given in 1929-30.]*

**[\*2 — Navigation. 3 points.**

Prerequisite, Mathematics 1, 22, or equivalent.

*Not given in 1929-30.]*

Other courses given at Columbia University are described in the Announcement of the Division of Mathematical and Physical Sciences.

## BOTANY

**A major in Botany.** — Students majoring in botany will be required to take in

**Botany** — Courses 51-52; 53-54 or 55-56; and such other courses, subject to the approval of the department, as meet the particular needs and purposes of each student.

**Other fields** — At least one year's work in chemistry and zoölogy, a reading knowledge of a modern foreign language, and other courses according to the special needs of the student.

**Honors Course** (see page 57). — The comprehensive examination assumes (a) a knowledge of the morphology, physiology, and classification of plants, (b) a more thorough acquaintance with a particular field of botany, including work on a special problem in this field; (c) familiarity with the history of botany and subjects requisite for and cognate to a study of the major topic.

**51-52 — Principles of the morphology, physiology, and classification of plants.** Professors SINNOTT and CAREY, Misses HOPPER and HAMMOND. 8 points.

Lectures, M. and W. at 11 and 4 hours of laboratory work, M. and W., 1-3, or Tu. and Th., 9-11, or Tu., 2-4 and Th., 1-3.



**53-54** — Comparative morphology and development of plants, study of types. Professor HAZEN. 8 or 10 points.

Tu. and Th. at 9 and 4 or 6 hours of laboratory work, to be taken on Tu. and Th. in so far as possible.

Prerequisite, Course **51-52**, or its equivalent.

**55-56** — Structure and relationships of flowering plants. Professor HAZEN. 6 or 8 points.

Hours to be arranged for a conference and 4 or 6 hours of laboratory work.

Prerequisite, Course **51-52**, or its equivalent.

**149** — Principles of genetics. Professor SINNOTT. 3 points.

Tu. and Th. at 3 and two hours of laboratory work, Tu., 4-6 (or by arrangement).

Prerequisite, a year of college work in either botany or zoölogy.

**151-152** — Bacteria and ferment fungi. Professor CAREY and Miss ———. 10 points.

M. and F. at 1 and 6 hours of laboratory work, M., 9-12, 2-5, and W., 9-12, 1-5, or hours to be arranged.

Open only to properly qualified juniors and seniors.

Prerequisite, Course **51-52**, or its equivalent, and a minimum of one year's work in college chemistry.

**153** — Physiological anatomy of vascular plants. Mrs. RICHARDS. 5 points.

Tu. and Th. at 11 and 6 hours of laboratory work, M. and Th., 1-5, Tu., 2-5, W., 9-12 in so far as possible.

Prerequisite, Course **53-54** or **55-56**, except by special permission of the instructor.

**154** — Physiology of plants from the standpoint of nutrition. Mrs. RICHARDS. 5 points.

Tu. and Th. at 11 and a minimum of 6 hours of laboratory work, so far as possible on M. and Th., 1-5, Tu., 2-5, W., 9-12.

Prerequisite, Course **153**, or the special permission of the instructor. Some knowledge of chemistry is also essential.

Courses **154** and **156** are ordinarily given in alternate spring sessions.

[**156** — Physiology of plants from the standpoint of growth. Mrs. RICHARDS. 5 points.

Prerequisite, Course **153**, or the special permission of the instructor. Some knowledge of chemistry is also essential.

*Not given in 1929-30.*]

**157** — Embryology and microscopical methods. Professor HAZEN. 4 points.

Hours to be arranged for 8 hours of laboratory work with occasional lectures.

Open to students only after consultation with the instructor.

Practice in methods of microscopical technique, with the study of the embryology of one or more types.

**158 — Structure and development of algae.** Advanced course. Professor HAZEN. 1 lecture, and 6 or 8 hours of laboratory work. 4 or 5 points.

Hours to be arranged.

Prerequisite, Courses 51-52 and 53-54.

Special attention may be given to algae of water supplies.

**161, 162 — Advanced morphology and physiology.** Professors SINNOTT, HAZEN and CAREY, and Mrs. RICHARDS.

Hours and credits by arrangement.

Work will be planned to suit the needs of students after consultation with the instructors. This course may be taken in successive years.

## CHEMISTRY

**A major in Chemistry.** — Students majoring in chemistry will be required to take in

Chemistry — Courses 5-6, 63, 64, and 41-42, or 65, 66.

Other fields — Physics — a year's work in general physics;

Mathematics 1, 22 or 7-8. A course in calculus is advised.

A reading knowledge of German to be acquired by the beginning of the 3rd year's work;

A reading knowledge of French is also necessary for students specializing in chemistry.

**Honors Course** (see page 57). — The comprehensive honors examination assumes (a) knowledge of inorganic, organic, physical and analytical chemistry; (b) a more thorough acquaintance with one of these divisions and of a special problem in this; (c) the history and present trend of chemistry; (d) mathematics, physics, French and German.

**5-6 — General inorganic chemistry.** Professors REIMER and KELLER, Dr. WARE and Mrs. FISHER. 8 or 10 points.

Lectures: Tu. and Th. at 10 and a third hour S. at 10 or F. at 1. The S. hour is intended primarily for freshmen.

Laboratory: For students who are beginning the subject (I) Tu., W. or Th., 2-4:30 (8 points); (II) Th., 2-4:30 and Tu. or W., 2-4:30 (10 points).

For students who have passed the entrance examination in chemistry (III) M., 2-4:30 (8 points); (IV) M. and W., 2-4:30 (10 points). In order to obtain full credit for the course a student who has passed the entrance examination in chemistry must take laboratory section (III) or (IV) and lectures on Tu., Th. and S. at 10.

Students intending to enter a medical school should register for laboratory section (II) or (IV).

Prerequisite or parallel, Mathematics 1, 22 or 7-8.

**63, 64 — Qualitative and quantitative analysis.** Professor KELLER and Dr. WARE. 12 points.

M., W. and F. at 10 and 6 hours of laboratory work, Tu., 2-5 and Th., 1-4 or M. and W., 1-4.

Laboratory deposit, \$20.00.

Prerequisite, Course 5-6.

**65, 66 — Quantitative analysis, advanced course including microanalysis.** Professor KELLER and Dr. WARE. 8 points.

Tu. at 11 and 6 hours of laboratory work, Tu., 2-5 and Th., 1-4.

Laboratory deposit, \$25.00.

Prerequisite, Course 63, 64.

This course is designed to meet the needs of individual students and will be given for a class of five or more.



**41-42 — Organic chemistry.** Professors REIMER and RICE. 12 points.

M., W. and F. at 9 and a minimum of 6 hours of laboratory work, M. and W., 1-4 or Tu. and Th., 9-12.

Laboratory deposit, \$25.00.

Prerequisite, Courses 5-6 and, except for reasons of weight, 63, 64.

**42a — Elementary organic chemistry.** Professor RICE. 6 points.

M., W. and F. at 10 and a minimum of 6 hours of laboratory work, M. and W., 1-4 or Tu. and Th., 9-12.

Laboratory deposit, \$15.00.

Prerequisite, Course 5-6.

Short course intended primarily for pre-medical students.

**[105 — Inorganic chemistry, advanced course.** Professor KELLER. 6 points.

Laboratory deposit, \$15.00.

Prerequisite, Courses 63, 64, Physics 11-12.

*Not given in 1929-30.]*

**106 — Physical chemistry.** Professor KELLER. 6 points.

M., W. and F. at 1 and a minimum of 6 hours of laboratory work, Tu. and Th., 9-12.

Laboratory deposit, \$15.00.

Prerequisite, Courses 63, 64; 65 or 105; Physics 11-12, and a course in calculus.

**145 — Organic chemistry, advanced course.** Professor REIMER. 6 points.

M., W. and F. at 1 and a minimum of 6 hours of laboratory work, Tu. and Th., 9-12.

Laboratory deposit, \$15.00.

Prerequisite, Courses 5-6; 63, 64; 41-42.

**157-158 — Problems in chemistry.** Professors REIMER and KELLER.

Laboratory work and conferences. Open only to advanced students. Credit will be given according to amount of work accomplished.

Laboratory deposit, \$30.00.

**Journal Club.** 1 hour. The instructors and the advanced students meet for reports and discussion on recent scientific papers.

## ECONOMICS AND SOCIAL SCIENCE

*Course 18 counts in Group II unless taken as part of a major in Economics or Sociology in which case it may count toward that major and the 14-point requirement in Group II must be satisfied in other subjects.*

**A major in Economics or Sociology.** — Students may major in economics, or in sociology, or in both, but only one introductory course may count toward a major. If a student majors in both economics and sociology, the points for the major must be evenly divided between these subjects. Sociology 15, 16 may be counted toward an economics major. All students majoring in economics or sociology will be required to have a reading knowledge of French or German and to take

**Economics 1-2 and 17** — Beyond these the work will vary with the interest of the students. Those interested in economics will take Courses 13, 14 and other work to be arranged in consultation with the department. Those interested in sociology will take Sociology 1-2 and 53, 54 and other courses to be arranged in consultation with the department.

**Other social sciences** — In view of the essential unity of the social sciences every student majoring in economics or in sociology or in both is required to take courses from the following list amounting to 12 points distributed between two departments:

Anthropology 1, 2 or 3, 4; 109, 110;  
 Government 2; 7, 8;  
 History 1-2; 9, 10; 19, 20; 51, 52; 153, 154;  
 Psychology 1;  
 Religion 3, 4.

**Honors Course** (see page 57). — The comprehensive examination assumes: (1) knowledge of (a) principles of economics, current economic problems, history of economic theory and development, statistics, and (b) principles of sociology, current sociological problems, social work, psychological and anthropological sociology; (2) a more thorough acquaintance with a smaller group of allied subjects from the preceding list; and (3) special proficiency in some one chosen interest from this field. French and German are desirable as tools. Important allied subjects are government, psychology, history and anthropology. A detailed statement of honors requirements is available on application to the department.

### Economics

**1-2 (or 2r-1r) — Outlines of economics.** Professors HUTCHINSON and BAKER, and Dr. BURNS. 6 points.

Beginning in September: M., W. and F. at 9 (I), at 2 (II), also, for freshmen only, M., W. and F. at 11 (III). This course is divisible for freshmen only.

Beginning in February: 2r (the equivalent of 1) — M., W. and F. at 10.

Continuing in September: 1r (the equivalent of 2) — M., W. and F. at 10.

Course 1 or 2r is prerequisite to Course 2 or 1r. Both courses are required of majors and are prerequisite to other courses as indicated.

Course 1 (or 2r): A concrete description of economic life and a study of particular forms of business organization such as factories, railroads, farms, banks, stock and produce exchanges. The class work is supplemented by visits to some of the organizations studied.

Course 2 (or 1r): The more general principles underlying production and distribution of wealth; the influences that determine prices; theories of wages, interest and profits, competition and monopoly, the relation of modern business to wealth and welfare; the rôle of the state in economic life.

**13 — Economic history of England.** Professor HUTCHINSON. 2 or 3 points.

Tu. and Th. at 11.

Open to all excepting freshmen.

A survey of the economic development of England since 1800. Special attention is given to the social and economic problems of machine production; the trade policy of England; the labor movement; imperialism.

**14 — Economic history of the United States.** Professor HUTCHINSON. 2 or 3 points.

Tu. and Th. at 11.

Open to all excepting freshmen.

A study of leading economic questions since 1800 in agriculture, industry, trade, transportation, and banking.

**17 — Introduction to statistics.** Dr. ELIOT. 3 points.

Tu. and Th. at 10 and a laboratory hour to be arranged.

The gathering of statistical data; questionnaires; tabulation; graphs and charts; simpler methods of summarization and comparison. Statistical fallacies. Illustrative examples from various sciences.

**18 — Statistical methods.** Dr. ELIOT. 3 points in Group II.

Tu. and Th. at 10 and a laboratory hour to be arranged.

Prerequisite. Mathematics 7 or its equivalent.

Students are given the opportunity to acquaint themselves with the more common and basic techniques, such as index numbers, correlation, and analysis of time-series, and with some statistical applications of the normal probability curve.



**19, 20 — Labor in industry and society.** Professor BAKER. 6 points.

M., W. and F. at 10.

Prerequisite, Course 1-2 or 2r-1r. Prerequisite for Course 20, Course 19 or the special permission of the instructor.

Winter session: The causes of industrial unrest and the attempts to relieve these causes through legislation and other public action: conciliation, mediation and arbitration; pensions, profit sharing, employee representation, etc. Scientific management.

Spring session: Organized labor in industry and society, its nature, development and policies in the United States. The response of employers to the demands of unions; legal status of trade unions, the labor injunction, labor in politics, the new unionism and its program. Organized labor in European countries and in Russia. The International Labour Office.

**21 — Financial organization and investment.** Professor BAKER. 3 points.

M., W. and F. at 2.

Prerequisite, Course 1-2 or 2r-1r.

The business corporation; promotion, financial management, types of securities, basis of their issue and principles of their valuation, the stock exchange; insolvency, reorganization, combination and consolidation. The principles of sound investment. Sources of information and problems of analysis. The investment trust. The foreign investment market.

**22 — Business administration.** Professor BAKER. 3 points.

M., W. and F. at 2.

Prerequisite, Course 1-2 or 2r-1r.

The industrial operations of the corporation. Location and management of the plant; problems concerning working capital, the purchase and storing of materials, the sales department, price, competition, coöperation, combination, employment management and personnel administration, production processes, cost accounting. The federal department of standards and the division of simplified practice.

**23 — Money and banking.** Dr. BURNS. 3 points.

M., W. and F. at 11.

Prerequisite, Course 1-2, or 2r-1r.

The functions performed by money and banks. The effects of changes in the purchasing power of money. The influences affecting the purchasing power of money in domestic trade and in foreign exchange. The currency and banking systems of the United States and England. Proposals for the stabilization of prices.

**24 — The price system and the economic organization of society.** Dr. BURNS. 3 points.

M., W. and F. at 11.

Prerequisite, Course 1-2, or 2r-1r.

The principal theories of prices. The part played by the price system in the organization of production. Natural conditions affecting the prices of goods and services. Legal influences and commercial and industrial practices affecting prices. The distribution of incomes resulting from the present price system. The effectiveness of the present system as a means of organizing production and of distributing wealth.

**25-26 — The consumer in modern society.** Professor HUTCHINSON. 4 or 6 points.

Tu. and Th. at 9.

Open to all excepting freshmen.

Winter session: A general survey of consumption based upon a study of standards of living in the United States and in Europe. This will include an analysis of consumer's budgets, laws of consumption, changes and trends in consumer demands.

Spring session: The relation of the consumer to the price system; the determining factors in consumer demand; installment buying; advertising; fashion; public and private effort to educate or protect the consumer.

**51 — Seminar on business administration.** Professor BAKER. 2 points.

Hours to be arranged.

Open to honor students.

**52 — Seminar on financial organization and investment.** Professor BAKER. 2 points.

Hours to be arranged.

Open to honor students.

**[53, 54 — Seminar on labor in industry and society.** Professor BAKER. 2 points.

Open to honor students and to majors with the permission of the instructor.

*Not given in 1929-30.]*

More advanced courses given at Columbia University are described in the Announcement of the Division of History, Economics, Public Law and Social Science.

### Sociology

**1-2 — Introduction to sociology.** Professor MACIVER. 6 points.

M., W. and F. at 11.

Open to sophomores, juniors and seniors.

The elements of the social structure, customs, institutions, and associations; group interests and group formations; the family; the fabric of modern large-scale organization; the adjustment of society to environment; the more recent evolution of the social structure.

**15 — Problems of population.** Professor CHADDOCK. 2 points.

Tu. and Th. at 10.

Open to sophomores, juniors and seniors.

Growth and distribution of world population; relation to resources; causes and social significance of population movements; the problem of quality; individual and race differences. Population of the United States; composition and characteristics: immigration and its restriction; internal movements; urban and rural problems; significance of differential birthrates.

**16 — Social statistics: vital and economic.** Professor CHADDOCK. 2 points.

Tu. and Th. at 10.

Open to sophomores, juniors and seniors.

Collection, analysis, presentation and interpretation of data on births, deaths, sickness, marriage and divorce; vital statistics and the public health; factors in mortality and length of life; significance of control over mortality and sickness; relation to quality of population. Methods of measuring real earnings and of describing standards of living.

**21, 22 — An introduction to the field of social work.** Miss TOUSLEY. 4 points.

Th., 1-3.

Open to juniors and seniors. Course 22 is open only to students who have had Course 21.

A description of types of social work found in present day practice, and an interpretation of main underlying principles; social work organizations and the various methods employed in meeting social problems.

**[51, 52 — Seminar in sociology.** Professor MACIVER. 4 points.

Open to honor students and to majors with the permission of the instructor.

*Not given in 1929-30.]*

**53, 54 — Principles and theories of social evolution.** Professor MACIVER. 4 points.

Tu. and Th. at 3.

Open to ~~seniors~~ juniors + seniors.

The idea of evolution as applied to society. Social change versus social development. The search for social laws. Some fundamental principles of social evolution. The theory of economic determination. The theory of the cyclical movement of society. Biological and psychological interpretations. Students will be required to write a paper each session.



[56 — Seminar on the economic and social position of women. Professor HUTCHINSON. 2 points.

Open to honor students and to majors with the permission of the instructor.

*Not given in 1929-30.]*

See also Public Law 171, 172, page 102.

More advanced courses given at Columbia University are described in the Announcement of the Division of History, Economics, Public Law and Social Science.

## EDUCATION

*Beginning with the Class of 1932, courses in education will not satisfy the 14-point requirement in any group.*

†07A (or †08A) — Educational psychology. Professors H. L. HOLLINGWORTH and G. S. GATES and Dr. JERSILD. 3 points.

Winter session only: 07A — M., W. and F. at 1.

Spring session only: 08A — M., W. and F. at 2.

Prerequisite, Psychology 1 or equivalent.

An introductory survey of the applications of psychology to teaching, school management, and modern educational practice and theory. This course is prerequisite to all other courses in education, except Course B01A, B02A, with which it may be taken parallel.

†B01A, B02A — History and principles of education. Professor GOODSELL and Mr. L. F. SMITH. 6 points. *Junior & Seniors*

M., W. and F. at 10 (I), at 1 (II).

Prerequisite or parallel, Course 07A or 08A.

Winter session: The historical development of educational systems and ideas, in their social settings, up to the close of the seventeenth century.

Spring session: The evolution and evaluation of contemporary principles of education. The student will be encouraged to formulate for herself a tentative philosophy of education.

The entire course satisfies the New York State requirements in history and principles of education for the professional provisional certificate.

†35A-36A — High school teaching. Professor WOODRING. <sup>6</sup> 4 points.

M. and W. at 2. *Seniors only*

Prerequisite, Course 07A or 08A. Prerequisite or parallel, Course B01A, B02A.

A course in methods and observation for students in Barnard College and Columbia College who are preparing to teach in secondary schools. Application of the principles discussed will be made through the solution of practical problems and observation of high school teaching.

Other courses offered at Teachers College and open under certain conditions to specially qualified seniors upon consent of the Committee on Instruction of Barnard College and the instructor in Teachers College are Education 107A or 108A — Educational psychology; Education 107C — Psychology applied to teaching; Education 101A-102A — History of education; Education 103A or 104A — Principles of teaching; Education 103B or 104B — Principles of practical arts teaching; Education 133M-134M — Elementary education.

## Methods Courses

Specially qualified seniors may, with the permission of the Dean and the Committee on Instruction of Barnard College, and the appropriate instructor in Teachers College, elect methods courses in the teaching of general science, biology, physics, chemistry, English, foreign languages, geography, history and mathematics, and in the various fields of practical arts. There will, however, be no opportunity for Barnard students to do practice teaching.

For a list of methods courses, students are referred to the *Announcement of Teachers College*.

## ENGLISH

**A major in English.** — Students majoring in English and graduating not later than February 1931 will be required to take in

**English** — An examination in English language, or 3 points chosen from the following courses: 39-40; 41, 42; 43, 44; 53, 54.

6 points in each of two of the following periods: Medieval literature, Elizabethan literature, seventeenth century, eighteenth century, nineteenth century, American literature.

**Other fields** — Related courses in other departments in conjunction with work in the periods of literature indicated above. A reading knowledge of at least two foreign languages, one of which should be modern.

Students majoring in English and graduating in June 1931 or thereafter will be required to take in

**English** — *A* or *B* as follows:

*A.* A comprehensive examination in three parts: (1) history of the English language including a reading knowledge of Anglo-Saxon or Middle English, (2) English literature before 1700, (3) English and American literature since 1700.

*B.* Part 2 or 3 of the comprehensive examination described above and 18 points from Group I (Composition) passed with at least grade B, 6 points to be taken prior to the junior year.

**Other fields** — Related courses in other departments. A reading knowledge of at least two foreign languages, one of which should be modern.

**Honors Course** (see page 57). — Required of all candidates in each year of candidacy: Course 91, 92. The comprehensive examination assumes: (a) general knowledge of the growth and structure of the English language and command of either Anglo-Saxon or Middle English; (b) knowledge of the more important English authors and of their relations to literary periods; (c) comprehensive and detailed knowledge of one period or movement of major importance; (d) such knowledge of English history and of continental literature as is needed in each case.

**A1 (or A2r), A2 — Composition.** Professors FAIRCHILD and BALDWIN, Mr. MARSHALL, Miss REYNARD, Mrs. MCGILL, Miss ROSENBLATT and Mr. BARKER. 6 points.

Winter session only: A1 — M., W. and F. at 10 (I), at 2 (II), Tu., Th. and S. at 11 (III).

Spring session only: A2 — M., W. and F. at 10 (I), at 2 (II), Tu., Th. and S. at 11 (III).

Spring session only: A2r (the equivalent of A1) — M., W. and F. at 10.

Generally prescribed for freshmen, and prerequisite for any other course except Courses 21-22; 28; 35, 36; 37, 38; 39-40; 41, 42.

**A7, A8 — Language and composition for foreign students.** Professor GREET. 6 points.

Tu. and Th. at 2 and a conference hour.

Students not thoroughly accustomed to the use of English should consult the instructor immediately upon admission to college. This course may be substituted in such cases for Course A1, A2, or by special permission may be taken as an elective.

**C1 — Speech.** Professor GREET and Mrs. DAVIS. — Prescribed in the winter session in conjunction with Course A1.

Hours to be arranged.

**C2 (or C5) — Voice training.** Mrs. DAVIS and Miss KELLER. 1 point.

Winter session only: C5 — M. and F. at 11 (I), Tu. and Th. at 9 (II), at 10 (III).

Spring session only: C2 — M. and F. at 9 (I), at 2 (II); Tu. and Th. at 9 (III), at 10 (IV).

Prescribed for freshmen and for students transferring from other institutions unless they have been excused by the department.

Instruction in voice, intended to assist students to speak audibly and distinctly.



GROUP 1. *Composition*

Prerequisite, Course A1, A2.

**2 — Composition.** Professor BALDWIN. 3 points.

M. and W. at 2 and a conference hour.

Open to students excused from Course A2.

Consecutive writing in a chosen field, criticism and practice in others.

**3, 4 — Advanced composition.** Professor BREWSTER. 6 points.

Tu. and Th. at 10 and a third hour to be arranged.

Intended for students who wish unrestricted practice in writing on subjects or in fields of their own choosing. Daily themes (winter session) and weekly themes (spring session).

**11, 12 — Story-writing.** Miss STURTEVANT. 6 points.

Tu., 4-5:50 and a third hour to be arranged.

Intended primarily for students who wish to study and practice the short story, this course considers other forms of magazine writing incidentally.

**15, 16 — Play-writing.** Professor LATHAM. 4 or 8 points.

M. and W. at 3 and an hour for criticism.

The primary intention is not to train playwrights, but to give an insight into drama as a mode of expression. Critical study of plays in text and in the theatre. Dramatizations, writing of original sketches, pantomimes and plays. Stage trial of all work by members of the class.

GROUP 2. *Speech**Open to all students.***21-22 — Elocution.** Miss KELLER. 4 points.

M., W. and F. at 1.

Winter session: The mechanics of voice and speech; breathing exercises, vocal gymnastics and a practical study of English phonetics. Spring session: The principles of good reading aloud with special reference to phrasing, inflection and emphasis.

**23-24 — Advanced elocution.** Mrs. DAVIS. 4 points.

M., W. and F. at 11.

Prerequisite, Course 21-22.

Winter session: Utterance, quality of voice, force, pitch and time. Spring session: Application of above principles to the oral presentation of literature.

**28 — Public speaking.** Mrs. MCGILL. 2 points.

Th., 3-4:50.

The technic of argumentative persuasion with criticism of posture, gesture, voice. Students should consult the instructor in advance.

GROUP 3. *Literature*

Course A1, A2 is prerequisite for all courses except 35, 36; 37, 38; 39-40; 41, 42.

**35, 36 — English poetry.** Mrs. MCGILL and Miss ROSENBLATT. 4 or 6 points.

Tu. and Th. at 2 and a conference hour.

Winter session: Shakespere, Spenser, Milton, Elizabethan and seventeenth century lyric poetry. Spring session: Burns, Wordsworth, Coleridge, Byron, Shelley and Keats.

**37, 38 — English prose.** Mr. MARSHALL. 4 or 6 points.  
M. and W. at 9 and a conference hour.

Study of selected texts from the seventeenth century to the present.

**39-40 — The English language.** Professor GREET. 4 points.  
Tu. and Th. at 10.

A study of modern English from the point of view of history and use.

**41 — Anglo-Saxon.** Professor GREET. 2 points.  
Tu. and Th. at 11.

**42 — Beowulf.** Professor GREET. 2 points.  
Tu. and Th. at 11.  
Prerequisite, Course 41.

**43, 44 — Middle English.** Professor GREET. 4 points.  
W., 3-4:50.  
Prerequisite to Course 44: Course 43, 41, or 39-40, or 53 or the equivalent.  
Study of texts illustrating the history of the language.

**51, 52 — Medieval literature.** Miss STURTEVANT. 6 points.  
Tu. and Th. at 11 and a conference hour.

Selected medieval texts studied in translation with regard to literary form and cultural background; Beowulf, Old Irish, Roland, Icelandic sagas, the Nibelungen cycle, Arthurian romance on the continent and in Britain, the Golden Legend, Reynard the Fox; short tale, chronicle, popular ballad; development of legend in relation to mythology and folklore; Dante.

**53 — Chaucer.** Professor BALDWIN. 3 or 4 points.  
M., W. and F. at 9.  
The language and poetry of Chaucer, the ideas and literary habits of his time.

**54 — The Later Middle Age and the Renaissance.** Professor BALDWIN.  
3 points.  
M. and W. at 9 and a conference hour.  
Prerequisite, Course 53 or 43 or the equivalent.

*Piers Plowman*, *Pearl*, and other fourteenth century poems; the fifteenth century; More and other humanists; assignments for individual study in literary and social history.

**57, 58 — Development of English drama.** Professor LATHAM. 6 points.  
M., W. and F. at 1.  
The historical and literary development of English drama from its origins to the eighteenth century.

**59, 60 — Modern English drama.** Professor LATHAM. 6 points.  
M., W. and F. at 2.  
English and American playwrights from the eighteenth century to the present.

**61, 62 — Shakspeare.** Professor FAIRCHILD. 6 points.  
Tu. and Th. at 9 and a third hour to be arranged.



**63, 64 — Elizabethan literature.** Professor HOWARD. 4 or 6 points.

M. and W. at 2 and a conference hour.

The Renaissance in England; non-dramatic poetry from Wyatt and Surrey to Spenser and Donne; the rise of English prose.

**65, 66 — English literature of the seventeenth century.** Professor HOWARD. 4 or 6 points.

Tu. and Th. at 2 and a conference hour.

Milton, Dryden and the literature of their times.

**67, 68 — English literature of the eighteenth century.** Miss WEEKS. <sup>6</sup>~~8~~ points.

M. and W. at 10 and a conference hour.

**69, 70 — The English novel.** Miss STURTEVANT. 4 points.

Tu. and Th. at 10.

The novel as a literary type and as a social document. The contemporary English and American novel as an approach to the eighteenth and nineteenth century novel.

**71, 72 — The romantic movement.** Mr. MARSHALL. 4 or 6 points.

Tu. and Th. at 10 and a conference hour.

English literature from Blake to Byron.

**73, 74 — English Victorian literature.** Professor HOWARD. 4 or 6 points.

Tu. and Th. at 11 and a conference hour.

Carlyle, Mill, Tennyson, Newman, Arnold, Ruskin, Pater, Browning, Morris, Rossetti, Swinburne, Kipling.

**77, 78 — American literature.** Miss REYNARD. 4 or 6 points.

Tu. and Th. at 9 and a conference hour.

**91, 92 — Special reading.** Professors BREWSTER and FAIRCHILD and Miss REYNARD. 4 points.

M., 2-4 (I), Tu., 2-4 (II), Th., 3-5 (III).

Required of candidates for honors in English and recommended for major students in the junior year. Not open to other students. Registration in each section is strictly limited.

Special reading planned in each case to supplement and coordinate the student's other courses in English and related subjects.

## FINE ARTS

**A major in Fine Arts.** — Students majoring in fine arts will be required to take in

**Fine Arts** — Courses 27, 28; 29, 30; 37, 38 and other courses to be arranged in consultation with the department.

**Other fields** — Courses in history, literature, languages, philosophy or other fields which will vary with the special interest of the student and must be arranged in consultation with the major department.

**1-2 — Introduction to the study of fine arts.** Professor HARING. 4 points.

M. and W. at 11.

Open only to freshmen and sophomores.

A general study of aesthetic problems as preparation for a more detailed study of the fine arts. This will include a discussion of the major problems of artistic expression and their solution in the fields of architecture, sculpture and painting followed by a consideration of the relation of art forms to certain great periods of European culture.

**27 — Ancient art.** Miss LAWRENCE. 3 points.

Tu. and Th. at 2 and a third hour to be arranged for conference or for visits to the Metropolitan Museum of Art.

Open to all excepting freshmen.

An introductory study of the art of Egypt, Mesopotamia, Persia, Greece and Rome.

**28 — Medieval art.** Professor SWIFT. 3 points.

Tu. and Th. at 2 and a third hour to be arranged for conference or for visits to the Metropolitan Museum of Art.

Open to all excepting freshmen.

An introductory study of the development of art in Europe in the Early Christian, Byzantine, Carolingian, Romanesque and Gothic periods.

**29 — Italian Renaissance painting.** Professor HARING. 3 points.

M. and W. at 2 and a third hour to be arranged for conference or for visits to the Metropolitan Museum of Art.

Open to juniors and seniors.

The development of Italian painting of the Renaissance, with consideration of related tendencies in the period.

**30 — Northern painting.** Professor HARING. 3 points.

M. and W. at 2 and a third hour to be arranged for conference or for visits to the Metropolitan Museum of Art.

Open to juniors and seniors.

The history and development of painting in the Flemish, German and Dutch schools from the end of the Gothic period through the seventeenth century.

**37 — Introduction to modern painting.** Professor J. D. YOUNG. 3 points.

Tu. and Th. at 11 and a third hour to be arranged for conference or for visits to the Metropolitan Museum of Art.

Open to juniors and seniors.

The development of modern painting from the seventeenth century to the present day, with a consideration of the cognate tendencies of the times.

**38 — Italian Renaissance sculpture.** Miss LAWRENCE. 3 points.

Tu. and Th. at 11 and a third hour to be arranged for conference or for visits to the Metropolitan Museum of Art.

Open to juniors and seniors.

The historical development of Italian sculpture from the end of the Romanesque period through the sixteenth century. Special attention will be given to the genius of the Renaissance as expressed in the works of Donatello and Michelangelo.

*60 - Prints + drawings Miss B. Mann*

**[\*100 — Renaissance and modern sculpture outside of Italy.** Professor HARING. 3 points.

Open to qualified seniors who have had a course in Italian sculpture or its equivalent.

The development of Renaissance styles in northern Europe and of post-Renaissance styles in all of western Europe and America until the present day.

*Not given in 1929-30.]*



**[\*101 — Evolution of ancient architecture. Professor SWIFT. 3 points.**

Prerequisite, Course 27 or its equivalent. Open to qualified seniors.

The evolution of the architecture of the countries in or near the Mediterranean basin from ancient Egypt through the Roman Empire. In addition to the analysis of the structural development a careful examination will be made of the relation of each architecture to its civilization and to the other arts produced in the same environment.

*Not given in 1929-30.]*

**[\*102 — Evolution of the architecture of the Middle Ages. Professor SWIFT. 3 points.**

Prerequisite, Course 28 or its equivalent. Open to qualified seniors.

The evolution of the Early Christian, Byzantine, Carolingian, Romanesque and Gothic styles. In addition to the analysis of the structural development a careful examination will be made of the relation of each architecture to its civilization and to the other arts produced in the same environment.

*Not given in 1929-30.]*

Courses 101, 102 and 103, 104 are given in alternate years.

**\*103 — Architecture of the Renaissance. Professor SWIFT. 3 points.**

M. and F. at 2 and a third hour to be arranged for conference.

Open to qualified seniors.

A study of the origin and development of Renaissance architecture in Italy and its subsequent history in other parts of Europe.

**\*104 — Modern architecture. Professor SWIFT. 3 points.**

M. and F. at 2 and a third hour to be arranged for conference.

Open to qualified seniors.

Types and theories in the structural art of modern times in Europe and America with special emphasis on the evolution of American architecture from the colonial period to the present.

**\*149 — Introduction to Greek art. Professor C. H. YOUNG. 3 points.**

M., W. and F. at 3 with occasional visits to the Metropolitan Museum of Art at hours to be arranged at the opening of the course.

Open to qualified seniors who have had Course 27 or its equivalent.

A brief survey of the pre-Hellenic antiquities followed by a study of historic Greek art in its various fields.

**\*150 — Introduction to Roman art. Professor MURRAY. 3 points.**

Tu. and Th., 2-3:25.

Open to qualified seniors who have had Course 149 or its equivalent.

A systematic study of the last phase of classic art as presented by Roman sculpture and painting, and of the elements of Roman architecture, with preliminary consideration of the Hellenistic and Etruscan influences.

**\*183 — Spanish art. Professor HARING. 3 points.**

Tu. and Th., 4-5:25.

Open to qualified seniors.

A survey of the important periods in the history of the art of Spain; the prehistoric cave painting; classical, Visigothic and Moorish remains; Romanesque and Gothic sculpture and art; the panel painters of the fifteenth and sixteenth centuries; Plateresque architecture and the great series of painters from El Greco and Velasquez to modern times.

GEOGRAPHY, GEOLOGY, AND MINERALOGY<sup>1</sup>

## Geography

**1, 2 — Physical and economic geography.** Dr. HOLZWASSER. 4 or 6 points.  
Tu. and Th. at 9.

## Geology

**A major in Geology.** — Students majoring in geology will be required to take in

**Geology** — Courses 1-2 (or 2r-1r), 13, and Mineralogy 1, 2, and other courses to be arranged in consultation with the department.

**1-2 (or 2r-1r) — General geology.** Elementary course. Professor OGILVIE and assistant. 8 points.

Beginning in September: **1-2** — Tu. and Th. at 11 and 4 hours of laboratory work, M. and W., 1-3, or 2-4, or Tu. and Th., 9-11, or Tu. and Th., 2-4. Occasional Saturday field trips in the spring.

Beginning in February: **2r** (the equivalent of **1**) — Tu. and Th. at 10 and 4 hours of laboratory work, Tu. and Th., 2-4.

Continuing in September: **1r** (the equivalent of **2**) — Tu. and Th. at 10 and 4 hours of laboratory work, Tu. and Th., 2-4.

Course **2r**, the equivalent of **1**, is offered in the spring session for students who want to begin a science in February; and Course **1r**, the equivalent of **2**, is offered in the winter session of the following year.

**5-6 — Applied geology.** Dr. HOLZWASSER. 4 points.  
M. and W. at 11.

A study of the minerals of economic importance and of the application of geology to present day industrial and commercial development.

**13 — Summer field course.** Dr. HOLZWASSER. 2 weeks in the field before opening of summer session and the subsequent preparation of a report. 3 or 4 points.

Prerequisite, Course **1-2**.

This course is not given every year. Registration must be made by April 15. The tuition fee of \$40 is payable by June 1.

**15-16 — Paleontology.** Dr. HOLZWASSER. 6 points.  
M. and W. at 10 and 2 hours of laboratory work to be arranged.

**17-18 — Glacial geology.** Professor OGILVIE. 4 points.  
Hours to be arranged.

Prerequisite or parallel, Course **1-2**.

**19 — General geology.** Second course. Professor OGILVIE. 3 points.  
Tu. at 3 and Th. at 1 and 2 hours of laboratory work to be arranged.  
Prerequisite, Course **1-2**.

Structural and dynamic geology.

<sup>1</sup> In the reckoning of points for major and minor subjects, geography, geology and mineralogy may be counted as one subject.



20 — Advanced historical geology. Dr. HOLZWASSER. 3 points. (Art. 124)  
 Tu. at 3 and Th. at 1 and 2 hours of laboratory work to be arranged.

27, 28 — Physiographic geology. Dr. HOLZWASSER. 6 points.  
 M., W. and F. at 9 with occasional substitution of laboratory work for a lecture.  
 Prerequisite, Course 1-2 or its equivalent.

\*124 — Advanced glacial geology. Professor OGILVIE. Lectures, reading, field and laboratory work. 3 points.  
 Hours to be arranged.  
 Prerequisite, Course 1-2.

[125-126 — General geology. Advanced course. Professor OGILVIE.  
 Hours and credit to be arranged.  
 Prerequisite, Course 1-2.  
 Not given in 1929-30.]

**Journal Club.** The instructors in Columbia University and advanced students meet one evening fortnightly for the discussion of current papers and problems. The meetings of the Journal Club are open to Barnard students taking courses in geology.

#### Mineralogy

1 — General mineralogy. Professor OGILVIE and assistant. 3 points.  
 Hours to be arranged for 1 lecture and 4 hours of laboratory work.  
 Prerequisite, a knowledge of elementary chemistry.

If there are less than six applications, arrangements may be made for parallel work in Columbia University.

2 — Blowpipe analysis. Professor OGILVIE. 3 points.  
 Hours to be arranged for 1 lecture and 4 hours of laboratory work.  
 Prerequisite, Course 1.

12 — Optical mineralogy. Dr. HOLZWASSER. 2 points.  
 Hours to be arranged for 1 lecture and 2 hours of laboratory work.  
 Prerequisite, Course 1. (Probably not given)

Other courses given at Columbia University are described in the Announcement of the Division of Geology, Geography and Mineralogy.

#### GERMANIC LANGUAGES AND LITERATURES

**A major in German.** — Students majoring in German will be required to take in German — Courses 9, 10 and 45, 46, and other courses to be arranged in consultation with the department.

**Other fields** — Courses will vary with the special interest of the student and must be arranged in consultation with the major department.

**Honors Course** (see page 57). — The comprehensive examination assumes (a) the ability to speak and write German easily; (b) a general acquaintance with German literature from its beginnings to the end of the nineteenth century; (c) a more thorough knowledge of some particular period; (d) some familiarity with the development of political, economic and social institutions in Germany and with German art. A general knowledge of European history is desirable.

(See also Introduction to the science of language, p. 125.)

**1-2 — Beginners' course.** Professor PUCKETT, Mr. ANSTENSEN and Miss SABARTH. 6 points.

M., W. and F. at 9 (I), at 11 (II), at 1 (III), at 2 (IV); Tu., Th. and S. at 9 (V).

Elements of grammar, easy reading, written and oral practice.

**3, 4 — Intermediate course.** Mr. ANSTENSEN and Miss SABARTH. 6 points.

M., W. and F. at 10 (I), at 1 (II); Tu., Th. and S. at 10 (III).

Prerequisite to Course 3, Course 1-2 or elementary entrance German.

Prerequisite to Course 4, Course 3 or intermediate entrance German.

Rapid reading of texts, with practice in writing and speaking German.

**5, 6 — Lessing, Goethe and Schiller.** Professor BRAUN. 6 points.

M., W. and F. at 11.

Prerequisite to Course 5, Course 3, 4 or a good grade in intermediate entrance German. Prerequisite to Course 6, Course 5 or special permission of the instructor.

The course emphasizes literary appreciation rather than practice in the language. A desirable prerequisite to more advanced courses in German literature.

**7, 8 — Modern German prose.** Professor PUCKETT. 6 points.

M., W. and F. at 10.

Prerequisite, Course 3, 4 or the permission of the instructor.

Rapid reading of modern German historical, critical, and scientific prose. Assignments in German newspapers and journals. Structure and development of vocabulary.

**9, 10 — Practice course.** Professor BRAUN. 4 points.

Tu. and Th. at 10.

Prerequisite, Course 3 or a good grade in intermediate entrance German.

Conversation and written exercises.

**15-16 — German conversation.** Professor BRAUN. 1 point if taken for both winter and spring sessions; no credit if taken for either session separately.

Th. at 1.

Prerequisite, a fair degree of proficiency in German.

Consultation with the instructor before registration is desired.

**17, 18 — German lyric poetry.** Professor PUCKETT. 2 points.

M. at 2.

Prerequisite, Course 3, 4 or its equivalent.

This course may be taken only in conjunction with another two or three-point German course.

**25, 26 — The drama of the nineteenth century.** Professor BRAUN. 4 or 6 points.

Tu. and Th. at 11.

Prerequisite, Course 5, 6 or 7, 8 or the equivalent.

After a brief survey of the earlier nineteenth century drama, the development of the modern realistic movement will be studied, with special emphasis on the works of Gerhart Hauptmann.



[27 — Prose fiction of the nineteenth century. Professor PUCKETT. 2 or 3 points.

*Not given in 1929-30.]*

28 — The literature of the twentieth century. Professor PUCKETT. 2 or 3 points.

M. and W. at 1.

Prerequisite, Course 5, 6 or 7, 8 or the permission of the instructor.

31 — Gottfried Keller. Professor PUCKETT. 2 or 3 points.

M. and W. at 1.

Prerequisite, Course 5, 6 or 7, 8 or the permission of the instructor.

[35-36 — Goethe's Faust. Professor BRAUN. 4 or 6 points.

While the major part of the work of this course consists of the study and interpretation of *Faust*, it also includes a survey of other important works of Goethe. The course is not divisible except by permission of the instructor.

*Not given in 1929-30.]*

[45, 46 — History of German literature from the earliest times to the nineteenth century. Professor BRAUN. 4 or 6 points.

*Not given in 1929-30.]*

Other courses given at Columbia University are described in the Announcement of the Division of Modern Languages and Literatures.

## GOVERNMENT

**A major in Government.** — Students with a major in government should elect in

**Government** — Courses 1, 2; 3, 4; 7, 8 and beyond these a number of advanced courses determined in each case in accordance with the field of interest of the student.

In advanced work in the department a division of interest is recognized between

*A* — American government, politics and constitutional law, and

*B* — International relations and comparative government.

Because of the close relationship between the subject matter of history and that of government students majoring in government may offer as part of the required 28 points, 6 points in history including a choice of History 9, 10; 1-2; or 11, 12. In like manner majors in history may offer courses in government. (See p. 106.).

**Other social sciences.** — In view of the essential unity of all the social sciences every major in government must, in addition to the major requirement described above, also elect a minimum of 6 points in each of two social science departments. Such elections shall be made from the following courses: —

Anthropology 1, 2; 3, 4; 109;

Economics 1-2; 13, 14; 17, 18;

History 9, 10; 11, 12; 19, 20; 51, 52; 84;

Philosophy 61-62;

Psychology 1, 25;

Sociology 1-2; 15, 16.

**Honors Course** (see page 57). — Candidates for honors in government will be examined both orally and by written paper on one of the two lines of interest described above.

**1, 2 — An introduction to American public affairs.** Professor MOLEY and Miss CLARK. 6 points.

M., W. and F. at 1.

Open to all students including freshmen.

A survey of contemporary American public problems including the governmental regulation and protection of business and labor, the conservation of natural resources, the protection of religious liberty and of free speech, the relation of the states to the nation, the promotion of public welfare, health and education, the enforcement of law and order, the administration of justice, the party system; the leadership of the executive; the process of administration; law and legislation; and the political problems of the larger American cities.

**3, 4 — Modern democracies.** Miss CLARK. 4 or 6 points.

Tu. and Th. at 11.

Introductory course open to all students including freshmen.

The political problems, politics and government of the leading states of the world, including the members of the British Empire, France, Germany, Italy, and Russia. The characteristics and influence of political leaders are considered. Especially recommended to students of history.

**7 — <sup>8</sup>Great American political personalities.** Professor MOLEY. 2 or 3 points.

Tu. and Th. at 9.

Introductory course open to all excepting freshmen. Especially intended for students not majoring in government who desire a broad survey of the subject matter of American politics.

American politics considered in the light of the ideas, achievements and influence of important leaders including Jefferson, Hamilton, Marshall, Jackson, Lincoln, Bryan, Roosevelt, La Follette, Wilson and others. The required reading in the course is largely drawn from the best recent biographies of these leaders supplemented by some descriptive and analytical political works.

**11 — International relations and world politics.** Miss CLARK. 3 points.

M., W. and F. at 2.

Prerequisite, 6 points in history or government.

Some of the chief points of international friction: nationalism, the antagonism of the races, white supremacy, militarism, imperialism, economic rivalry, secret diplomacy, with particular reference to the "danger spots" of the world. There will also be considered various forms of international coöperation, such as the League and its forerunners, the World Court, the Pan-American Union and the Dawes Plan.

**15, 16 — Research in politics.** Professor MOLEY and Miss CLARK. 4 or 6 points.

Hours to be arranged.

Prerequisite, Course 1, 2 and the permission of the department.

Special projects involving the use of first-hand materials in politics and public administration. Selected students may supplement research work in this course by actual observation of and participation in the work of political parties, legislative bodies and civic agencies.

*Note: The following graduate courses in the Department of Public Law and Government may be taken by properly qualified juniors and seniors. Students who desire to elect any of them must secure the approval of the Department of Government at Barnard. Ordinarily a minimum of 6 points of government in addition to a major interest in the social sciences is required as a prerequisite.*

**\*105-106 — American municipal administration.** Dr. GULICK. 6 points.

Th., 2-4.

**\*143 — The government of England.** Professor ROGERS. 3 points.

Tu. and Th. at 11.

**\*144 — The governments of Canada and Australia.** Professor ROGERS. 3 points.

Tu. and Th. at 11.

## Public Law

**\*103, 104 — Constitutional law of the United States.** Professor MCBAIN. 6 points.

Tu. and Th. at 10.

A consideration of the American federal system and of the constitutional limitations for the protection of life, liberty and property. Interstate commerce, the powers of Congress, the police power, taxation, obligation of contracts and protection to persons accused of crime.



**\*156 — National administration.** Professor MACMAHON. 3 points.

Tu., 2-4.

A study primarily of problems of control in its various aspects, including the law and practice of appointments and removals; of commissions, government-owned corporations and other semi-autonomous bodies; of the exercise of delegated powers to make rules and regulations and of the admission of vocational representation in this connection; of the possibility of state participation in the administration of national laws; and of fiscal supervision.

**\*161 — The administration of justice.** Professor MOLEY. 3 points.

Tu., 2-4.

The organization and practical operation of those institutions, state and federal, which are concerned with the administration of justice in both civil and criminal cases. Court organization, systems of law and procedure, the selection of judicial personnel, the functions and responsibilities of the bar, and the administration of police, prosecution, probation and parole. Attention will be focused upon the political, administrative, medical and sociological problems involved in contemporary jurisprudence. Especially recommended to pre-law students.

**\*171-172 — Modern ideas of the state.** Professor MACIVER. 6 points.

W., 4-6.

This course may count toward a major in sociology.

A review of the course of political thought from Machiavelli to the present, with more emphasis on the period since Rousseau; modern theories of sovereignty, of the functions, powers, and limits of the state. Present-day assaults on the principle of representative government, and of democracy in general.

Other courses offered at Columbia University are open to Barnard students under the conditions mentioned in the foregoing *Note*.

## GREEK AND LATIN

**A major in Greek, or in Latin, or in Greek and Latin combined.** — Students may major in Greek, or in Latin, or in Greek and Latin combined. Students majoring under this department will be required to take courses to be elected in appropriate sequence under the direction of the department. Toward a

**Major in Greek** — Any course in Greek and 4 points in Classical Civilization may count.

**Major in Latin** — Any course in Latin and 4 points in Classical Civilization may count.

**Major in Greek and Latin combined** — The following combinations are possible: (a) 18 points of Greek, 10 points of Latin, (b) 18 points of Latin, 10 points of Greek. No points in Classical Civilization may count.

At least one course in Greek composition or one course in Latin composition is strongly recommended. Students will find it profitable to take courses in Greek history, or in Roman history, or in both (History 15, 16; 17, 18), and courses in Classical Civilization.

**Other fields** — The work will vary with the special interest of the student and should be arranged in consultation with the Department of Greek and Latin.

**Honors Course** (see page 57). — The comprehensive examination assumes a general knowledge of the languages, the literature, and the civilization of (ai) ancient Greece and (aii) ancient Rome; (b) a more thorough knowledge of either (ai) or (aii); (c) a special knowledge of some particular problem, author or work within (b); (d) a reading knowledge of French and German; (e) necessary acquaintance with subjects cognate to those involved in (c).

(See also *Introduction to the science of language*, p. 125.)

## Classical Civilization

*Excepting for students majoring in Greek or in Latin, courses in Classical Civilization will count toward the 14-point requirement in the group indicated for each course by the numerals printed after the point value.*

**[51 — Greek life and thought.** Professor VAN HOOK. 3 points in Group III. Open to all excepting freshmen.

A portrayal of Greek civilization.

*Not given in 1929-30.]*

**52 — Greek art.** Professor C. H. YOUNG. 3 points in Group I.  
M., W. and F. at 1 and, at hours to be arranged, at the Metropolitan Museum of Art.

Open to all excepting freshmen.

**53, 54 — Roman life and thought.** Professor KNAPP. 4 points in Group III.  
Tu. and Th. at 2.

Open to all excepting freshmen.

**55, 56 — Greek literature in translation.** Mrs. PUTNAM. 4 or 6 points in Group I.

Tu. and Th. at 11.

Open to juniors and seniors.

Winter session: Greek poetry, with emphasis on the drama. Spring session: Greek prose, with emphasis on the dialogues of Plato.

**[57, 58 — Latin literature in translation.** Professor KNAPP. 4 points in Group I.

Open to all excepting freshmen.

Winter session: Plautus, Terence, Ennius, Lucretius. Spring session: Catullus, Vergil, Horace, Ovid.

*Not given in 1929-30.]*

### Greek

**1-2 — First course.** Professor HIRST. 3 recitations, 2 hours unprepared work in class-room. 8 points.

M., Tu., W., Th. and F. at 2.

Prerequisite, elementary Latin.

Grammar, composition, selected readings in prose and verse; selections from Homer's *Iliad*. This course may not be begun in the spring session.

**11 — Homer: *Odyssey*; Lucian: *selections*.** Professor VAN HOOK. 3 points.  
M., W. and F. at 10.

Prerequisite, Course 1-2 or elementary entrance Greek.

**12 — Plato: *selections*; Euripides (one play).** Professor PERRY. 3 points.  
M., W. and F. at 10.

Prerequisite, Course 1-2 or elementary entrance Greek.

**19-20 — Prose composition.** First course. Mr. WESTBROOK. 2 points.

Hour to be arranged.

May be taken in connection with any reading course in Greek (except 1-2), but not separately, except by special permission; particularly recommended to students who have taken only Course 1-2.

**21 — Greek tragedy.** Professor PERRY. 3 points.

M., W. and F. at 11.

Prerequisite, Course 11 or 12 or 25 or 26.



**22 — Greek comedy.** Professor VAN HOOK. 3 points.

M., W. and F. at 11.

Prerequisite, Course 11 or 12 or 25 or 26.

Several plays of Aristophanes, including the *Clouds* and the *Frogs*.

**25 — Selections from Herodotus: book V.** Professor HIRST. 2 points.

Tu. and Th. at 11.

Prerequisite, Course 1-2 or elementary entrance Greek.

Aspects of the Greek world in the sixth century and the early fifth century B.C.

**26 — Selections from the lyric poets.** Professor VAN HOOK. 2 points.

Tu. and Th. at 11.

Prerequisite, Course 11 or 12 or 25.

**29-30 — Prose composition.** Second Course. Professor VAN HOOK. 2 points.  
Hours to be arranged.

Prerequisite, Course 19-20, or its equivalent.

May be taken in connection with any reading course in Greek, but not separately (except by special permission). This course may be taken for credit in two different years.

**\*103, 104 — Greek literature. Part II, prose.** Professor VAN HOOK. 6 points.

Tu. and Th. at 4.

Prerequisite, Course 21 or 22 or 26.

General survey, with extensive reading, in Greek, of Greek prose literature.

**\*139-140. Prose composition.** Advanced Course. Professor PERRY. 4 points.

Hour to be arranged.

Prerequisite, Course 29-30.

Open to specially qualified seniors.

See also above, under *Classical Civilization*, p. 102.

### Latin

**1-2 — First course.** Miss GOODALE. 3 recitations, 2 hours unprepared work in class-room. 8 points.

M., Tu., W., Th. and F. at 2.

Open to all students who have not offered Latin at entrance.

Grammar, composition, selected readings in prose and verse, including a Roman comedy.  
This course may not be begun in the spring session.

**3 — Selections from Vergil: *Aeneid* I-VI.** Miss GOODALE. 3 points.

M., W. and F. at 9.

Prerequisite, Course 1-2 or 2 or 3 units in entrance Latin. Course 9-10 or 19-20 is strongly recommended as a parallel.

Parts of the *Aeneid* will be read and the poem will be studied as a whole.

**9-10 — Oral Latin.** Miss GOODALE. 1 point for the entire course; no credit for either session alone.

Th. at 3.

May be taken with any reading course in Latin, but not separately. Strongly recommended as a parallel to Courses 3 and 11.

**11 (or 12r) — Livy: *selections*; Catullus: *selections*.** Professor HIRST and Miss GOODALE. 3 points.

Winter session only: 11 — M., W. and F. at 1 (I); Tu., Th. and S. at 9 (II).

Section I is reserved for the more advanced students.

Spring session only: 12r — M., W. and F. at 9.

Prerequisite, Courses 1-2, 3 or their equivalent in entrance Latin. Course 9-10 or 19-20 is strongly recommended as a parallel.

**12 — Horace: *selected Odes and Epodes*.** Professor HIRST and Miss GOODALE. 3 points.

M., W. and F. at 1 (I); Tu., Th. and S. at 9 (II).

Section I is reserved for the more advanced students.

Prerequisite, Course 11 or 12r.

**[17-18 — Lectures on Latin literature.** Professor KNAPP. 2 points.

Open to students who are taking any reading course in Greek or Latin; particularly recommended to students in Courses 11, 12 and 12r.

*Not given in 1929-30.]*

**19-20 — Latin composition.** First course. Miss GOODALE. 2 points.

M. at 3.

May be taken in connection with any reading course in Latin, but not separately, except by special permission. Strongly recommended as a parallel to Courses 3 and 11.

**21 — Horace: *Satires, Epistles*.** Professor McCREA. 3 points.

M., W. and F. at 9.

Prerequisite, Course 11 or 12 or 12r.

Human intercourse viewed as one of the fine arts; constructive humor.

**22 — Juvenal; Martial; Pliny.** Professor HIRST. 3 points.

M., W. and F. at 9.

Prerequisite, Course 11 or 12 or 12r.

Roman life and thought in the early Empire.

**[25 — Selections from Vergil: *Aeneid VII-XII*.** Professor HIRST. 2 points.

Prerequisite, Course 11 or 12 or 12r.

*Not given in 1929-30.]*

**[26 — Lucretius: *selections*.** Professor McCREA. 2 points.

Prerequisite, Course 11 or 12 or 12r.

*Not given in 1929-30.]*



**27 — Tacitus: *Historiae I-II*.** Professor HIRST. 2 points.

Prerequisite, Course 11 or 12 or 12r.

Tu. and Th. at 9.

A study of the Year of the Four Emperors.

**28 — Seneca: *selected plays*.** Professor KNAPP. 2 points.

Prerequisite, Course 11 or 12 or 12r.

Tu. and Th. at 9.

A study of several plays, and of the influence of Seneca on the later phases of the drama.

**29-30 — Prose composition. Second course.** Professor KNAPP. 2 points.

M. at 3.

Prerequisite, Course 19-20.

May be taken in connection with any reading course in Latin, but not separately, except by special permission. This course may be taken for credit in two different years.

**35-36 — Latin syntax.** Professor KNAPP. 2 points.

Tu. at 10.

**37, 38 — Plautus and Terence: *selected plays*; Cicero: *Tusculanae Disputationes I, De Senectute, De Amicitia*.** Professor KNAPP. 6 points.

Tu. and Th. at 3 and a third hour to be arranged (if possible, Th. at 1).

Prerequisite, Courses 21, 22 or 25, 26 or 27, 28.

Roman comedy and the Roman theater. A study of the best thought of the ancient world in support of the doctrine of the immortality of the soul.

Courses 37, 38 and 41, 42 will ordinarily be given in alternate years.

**[41, 42 — Latin literature.** Professor KNAPP. 6 points.

Prerequisite, Courses 21, 22 or 25, 26 or 27, 28.

General survey, with extensive reading, in Latin.

*Not given in 1929-30.]*

**\*139-140 — Prose composition. Advanced course.** Professors McCREA and KNAPP. 4 points.

Hour to be arranged.

Prerequisite, Course 29-30.

Open to specially qualified seniors.

See also under Classical Civilization, page 102.

## HISTORY

**A major in History.** — Every student taking a major in history should elect in

History — Course 1-2 and at least two other general courses, such as those offered in ancient, medieval, English or American history (Courses 5, 6; 7, 8; 9, 10; 11, 12). She should then concentrate her attention on some special field in which to do work of a more advanced character, such as that offered in Courses 15, 16; 17, 18; 19, 20; 51, 52; 73, 74; 105, 106; 149, 150; 197, 198.

On account of the close relationship between the subject matter of history and that of government, a history major may offer as part of the 28 points of the major requirement 6 points in government selected from Courses 1, 2; 3, 4; 7, 8.

**Other social sciences.** — In view of the essential unity of the social sciences every major in history must elect also 6 points in each of two social sciences other than history: such election shall be from

Anthropology 1, 2; 3, 4; 109;  
Classical Civilization 51;  
Economics 1-2; 13, 14;  
Government 3, 4; 7; 11;  
Psychology 1;  
Religion 3, 4;  
Sociology 1-2.

A history major must acquire a reading knowledge of some foreign language.

With her work in history she may combine work in other departments to make up a group of correlated courses on some large subject, such as ancient history and philosophy or art, modern history and international relations or sociology, English history and literature or government, American history and economics, the history of thought and culture.

**Honors Course** (see page 57); A candidate for honors will be examined both orally and by written paper on one of the following fields of history: medieval, modern European, English, American. In addition she will be expected to know something of the chief historians and their works in the various fields of history, as well as to have an appreciation of the types and methods of historical study and writing. A detailed statement of honors requirements is available on application to the department.

### *I. Introductory course*

**1-2 — Survey of modern European history from the age of discovery to the close of the Great War.** Professor HUTTMAN, Miss YOUNG, Mr. PEARDON, and Mr. SAVELLE. 6 points.

M., W. and F. at 9 (I), at 11 (II); Tu., Th. and S. at 9 (III), at 10 (IV).

Winter session: Foundations of modern Europe; political, economic and intellectual achievements from the fifteenth century to the eighteenth; the British, French and American Revolutions; the era of Napoleon and the Congress of Vienna. Spring session: The Industrial Revolution; rise of nationalism; social, intellectual and economic problems of the nineteenth century; imperialism and world politics; causes, character and consequences of the Great War.

### *II. General courses*

**[5, 6 — The civilization of the ancient world.** Mr. PEARDON. 6 or 8 points.

The Orient, Greece and Rome. Class discussion of selected topics.

*Not given in 1929-30.]*

**[7, 8 — Europe in the Middle Ages.** Mr. PEARDON. 4 or 6 points.

The history of the Middle Ages from the decline of the Roman Empire to the rise of the national monarchies in western Europe; political movements and theories; social and economic organization; religious, intellectual and artistic life.

*Not given in 1929-30.]*

**9, 10 — History of the American nation from colonies to world power.** Professor EARLE and Miss YOUNG. 6 or 8 points.

M., W. and F. at 11.

Foundations of American nationality in the colonial era; political and social aspects of the Revolution, the Confederacy and the Constitution; rise of democracy; conflict between nationalism and sectionalism; Civil War and reconstruction; modern industrialism and capitalism; foreign relations and American participation in the Great War.

**11, 12 — Political and social history of England from the Norman Conquest to the World War.** Professor HUTTMAN. 4 or 6 points.

Tu. and Th. at 2.

Life in medieval England; the making of the constitution; Tudor England; the separation from Rome; the Elizabethan Age; the expansion of England. Political and social reforms of the nineteenth century; the Irish question; the Labour Party; international relations; the World War.



## III. More advanced courses

Barnard

15, 16 — History of the ancient Orient and of Greece. Mr. ~~PEARSON~~. 6 points.

M., W. and F. at 1.

A short survey of the ancient Orient; Greek civilization in its three "stages": Helladic, Hellenic and Hellenistic; fifth century Athens, as the highest type of Greek culture, and the Hellenistic Age, as the period of cultural transmission; a brief treatment of the rise of Rome and her conquest of the Mediterranean world.

[17, 18 — History of Rome. Mr. PEARSON. 6 points.

A brief survey of the history of early Rome and the Republic and a more detailed study of the Empire.

*Not given in 1929-30.]*

19, 20 — The United States since the Civil War. Miss YOUNG. 4 or 6 points.

M. and W. at 2 and a third hour to be arranged.

A study of some of the significant developments in the history of the United States, from the Civil War to the election of 1928. The method of the course will be the consideration of specific problems in industrial, social, economic, political, and diplomatic history, with practice in the use of source materials.

51, 52 — Pre-war and post-war Europe. Professor HUTTMAN. 6 or 8 points.

M., W. and F. at 10.

Political and social development of France, Germany, Russia and Italy since 1890. The Near East; the new imperialism; partition of Africa; international relations; the World War; the Peace Conference; the new Europe.

[73, 74 — The British Empire. Professor HUTTMAN. 4 or 6 points.

*Not given in 1929-30.]*

81, 82 — Seminar in historical study. Professors EARLE and HUTTMAN. 4 points.

Hours to be arranged.

Open to honor students.

## IV. Special courses by the visiting lecturer, Dr. Eileen Power.

84 — Studies in medieval history: the twelfth and fourteenth centuries, inclusive. Dr. POWER. 2 points.

Tu. and Th. at 11.

126 — Life in the Middle Ages. Dr. POWER. 3 points.

Tu. and Th. at 3, and conferences for Barnard undergraduates.

## V. Graduate courses

*Note: The following graduate courses in history, offered by the Faculty of Political Science, are open to seniors and specially qualified juniors. Written approval in advance of election and registration must be obtained from the chairman of the Barnard section of the Department of History. Ordinarily such approval will be granted only to students who have completed at least 18 points of history in Barnard, but in particular cases the department may consider as equivalent thereto other courses in the social sciences.*

**\*105, 106 — History of European thought and culture.** Professor MUZZEY and Miss YOUNG. 6 points.

Tu. and Th. at 10 and a third hour to be arranged.

The intellectual development of man; the thought and culture of the ancient civilizations; the philosophy and institutions of the Middle Ages; birth of the scientific spirit, and subsequent movements and speculation in various fields of religious, social and intellectual interest.

**\*149, 150 — History of nationality and nationalism.** Professor HAYES and Mr. SAVELLE. 6 points.

Tu. and Th. at 2 and a third hour to be arranged.

An analysis of the principle of nationality and its relation to human nature, physical environment, biological heredity, and human culture; a survey of expressions of national consciousness among primitive and ancient peoples; a study of the factors accentuating national consciousness in western Europe from the fourteenth to the eighteenth century; a critical examination of the rise of nationalism in the nineteenth and twentieth centuries; an attempted appraisal of effects of current nationalism upon domestic politics and international relations.

**[\*197, 198 — History of American foreign relations.** Professor EARLE and Mr. SAVELLE. 6 points.

International relations of the American people from independence to world power. An attempt to understand the expansive forces of American national life in their relation to an evolving foreign policy. An analysis of the varied international interests of Americans and of such representative policies as isolation, the Monroe Doctrine, the open door, and the freedom of the seas.

*Not given in 1929-30.]*

Other courses in History numbered **100-200**, offered by the Faculty of Political Science, may be taken by specially qualified Barnard seniors with the approval of the department.

## HYGIENE

**A1 (or A2) — Personal hygiene — Dr. ALSOP.** 2 points.

Winter session only: **A1** — M. and W. at 11 (I); Tu. and Th. at 2 (II).

Spring session only: **A2** — M. and W. at 1 (I); Tu. and Th. at 11 (II).

Prescribed for freshmen.

A study of the laws of health.

**ITALIAN.** See Romance Languages and Literatures.

**LATIN.** See Greek and Latin.

## MATHEMATICS

The courses in mathematics are arranged in two sequences, either of which is suitable for students electing mathematics as a cultural subject.

**Sequence A** is designed for students whose major interest lies in mathematics or in physics. In the courses of this sequence emphasis is placed on the formal and logical development of the subjects and also on the technique of operations and processes involved.

**Sequence B** is designed to meet the needs of students whose major interest lies in natural sciences other than physics, or in the social sciences. In the courses of Sequence B emphasis is placed on the practical application of elementary mathematics in the fields of science and social science. The cultural and vocational aspects of trigonometry, analytic geometry, the calculus, elementary mathematical statistics and graphical methods are stressed.

The arrangement of courses in both sequences admits of considerable flexibility. For example, a student who has elected in her freshman year courses in Sequence B can, without any handicap, change to Sequence A at the beginning of her sophomore year. A similar shift may be made from Sequence A to Sequence B, but students must consult the department to avoid duplication of work.



**A major in Mathematics.** — Students majoring in mathematics will be required to take in

**Mathematics** — 28 points selected from Sequence A and including Courses 133, 134 or 135, 136. With the approval of the department, courses in Sequence B may also count toward the major.

**Other fields** — The work will vary with the special interest of the student and must be arranged in consultation with the major department.

**Honors Course** (See page 57). — The comprehensive examination assumes (a) a general knowledge of algebra, geometry and analysis; (b) a more thorough acquaintance with one of these divisions and of a special field within it; (c) familiarity with the history and literature of mathematics, including the ready use of French and German texts; (d) a fair knowledge of a second subject approved by the department and selected from a list including the sciences generally as well as other appropriate departments of knowledge. For further information and adjustment of requirements to individual cases, candidates should consult the officers of the department.

### *Sequence A*

**1 (or 2r) — Trigonometry.** Professors MULLINS and SMITH and Dr. HOFMANN. 3 points.

Winter session only: **1** — M., W. and F. at 11 (I), at 2 (II).

Spring session only: **2r** — M., W. and F. at 2.

**22 (or 21r) — Analytic geometry.** Professor SMITH, Dr. HOFMANN and Mr. RAUDENBUSH. 3 points.

Winter session only: **21r** — Tu., Th. and S. at 10.

Spring session only: **22** — M., W. and F. at 11 (I), at 2 (II).

Prerequisite, Course **1** or Course **7**, Sequence B.

Introduction to the analytic geometry of the plane and of space.

**6 — Solid geometry and spherical trigonometry.** Mr. RAUDENBUSH. 3 points. M., W. and F. at 3.

Prerequisite, Course **1** or Course **7**, Sequence B.

A study of the usual theorems on lines, surfaces and solids. The spherical triangle and its solution.

**23 — Algebra and theory of equations.** Dr. HOFMANN. 3 points.

Tu., Th. and S. at 11.

Prerequisite, Course **1** or Course **7**, Sequence B.

Complex numbers, theory of equations, determinants, series and exponential functions, partial fractions, mathematical induction.

**27 — Projective geometry.** Professor MULLINS. 3 points.

M., W. and F. at 2.

Prerequisite, Course **22** or Course **7-8**, Sequence B.

A synthetic treatment of the essential topics of projective geometry developing the principal theorems on conic sections and ruled surfaces of the second order.

**30 — See Sequence B.**

**31-32 (or 32r-31r) — Calculus.** Professor MULLINS, Dr. HOFMANN and Mr. RAUDENBUSH. 6 points.

Beginning in September: **31-32** — M., W. and F. at 9.

Beginning in February: **32r** (the equivalent of **31**) — Tu., Th. and S. at 10.

Continuing in September: **31r** (the equivalent of **32**) — Tu., Th. and S. at 10.

Prerequisite, Course **22** or Course **7-8**, Sequence B.

Differential and integral calculus.

**33 (or 34r) — Calculus.** Dr. HOFMANN and Mr. RAUDENBUSH. 3 points.

Winter session only: **33** — M., W. and F. at 3.

Spring session only: **34r** — Tu., Th. and S. at 10.

Prerequisite, Course **31-32**.

Continuation of the study of calculus. Differential equations.

**[43 — The theory of space and time.** Professor SMITH. 3 points.

Prerequisite, Course **31-32**.

Foundation of Euclidean geometry; transformations, vectors, and tensors; non-Euclidean geometry; the special theory of relativity.

*Not given in 1929-30.]*

**45 — Analytic geometry of space and hyperspace.** Professor SMITH. 3 points.

M., W. and F. at 3.

Prerequisite, Course **31-32**.

Linear equations, transformations, vectors, forms and invariants.

**46 — Introduction to the theory of plane algebraic curves.** Dr. HOFMANN. 3 points.

Tu., Th. and S. at 11.

Prerequisite, Courses **23** and **31**.

Trilinear co-ordinates; general properties of algebraic curves; singularities; Plücker's formulas; intersections; linear systems of curves; special curves.

**56 — Differential equations.** Professor SMITH. 3 points.

M., W. and F. at 3.

Prerequisite, Course **33**.

An elementary course in differential equations.

**[133, 134 — Fundamental concepts of modern mathematics.** Professor KASNER. 6 points.

Prerequisite or parallel, Course **31-32**.

Some of the results of recent investigation, especially in their bearing on elementary mathematics: Euclidean and higher constructions; dimensionality and co-ordinates; the geometry of motion, transformations, groups and invariants; the concepts of number and function; infinity and the theory of assemblages; the theory of relativity.

*Not given in 1929-30.]*

**135, 136 — General introduction to higher mathematics.** Professor KASNER. 6 points.

M., W. and F. at 11.

Prerequisite or parallel, Course **31-32**.

Development of the number system. Functions of a real variable, infinite series, differential equations, including graphical methods. Complex and hypercomplex numbers, vector geometry, conformal representation. Groups, finite and continuous. Non-Euclidean and  $n$ -dimensional geometry. Mathematical physics.

### *Sequence B*

**7-8 — Mathematical analysis.** Professor MULLINS and Mr. RAUDENBUSH. 6 points.

M., W and F. at 10 (I), at 2 (II); Tu., Th. and S. at 9 (III).

Winter session: Co-ordinates, graphs, frequency curves, index notation, common logarithms and their application, trigonometry and its application. Spring session: Analytic geometry: the straight line, the circle, the conic sections, and exponential curves. Elementary treatment of the calculus and its application in finding rates, maximum and minimum values and areas. Graphical solution of polynomial equations.



[30 — Graphical and numerical methods. Professor MULLINS. 3 points.  
Prerequisite, Course 7-8 or Course 22, Sequence A.

Nomographic charts for calculation, solution of equations by graphical and numerical methods, numerical integration, numerical solutions of differential equations.

*Not given in 1929-30.]*

MINERALOGY. See Geography, Geology and Mineralogy.

## MUSIC

**A major in Music.** The courses in music are grouped under three main headings:

A. Esthetics and history.

B. Theory.

C. Applied music.

Students majoring in music should select one of the first two branches.

A major under A must include Courses 1-2; 5, 6; 11-12; 101-102.

A major under B must include Courses 31, 32; e33-e34; 35, 36; 131-132.

The student may then select courses under the other headings.

Credit for courses in Applied Music is given only when these courses are taken in addition to one or more courses under headings A and B.

### *A. Esthetics and history*

**\*1-2 — A survey of music.** Professor MOORE. 4 points.

Tu. and Th. at 11. 701 J.

This course requires no previous knowledge of music.

History of music from Palestrina to the present day.

**\*5 — Romantic composers.** Professor MASON. 2 points.

M. and W. at 10. 701 J.

Course 5 is open, except by special permission, only to those who have taken Course 1-2 with a grade of A or B.

Schubert through Wagner.

**\*6 — Post-romantic composers.** Professor MASON. 2 points.

M. and W. at 10. 701 J.

Course 6 is open, except by special permission, only to those who have taken Course 1-2 with a grade of A or B.

Brahms through Debussy.

**\*11-12 (old number 21-22) — Masterpieces of music.** Professor MOORE. 4 points.

Tu. and Th. at 2. 701 J.

Open to a limited number of students with the consent of the instructor. Designed to succeed Courses 1-2 and 5, 6.

Analytical and historical studies of selected great musical compositions.

**\*101-102 — Symphonic analysis.** Professor MASON. 4 points.

M. and W. at 11. 701 J.

Prerequisite, Courses 1-2; 5, 6; e33-e34.

**105** — Physical basis of music and musical instruments. Professor MALTBY.  
3 points.

Hours to be arranged.

The nature of the vibrations of sounding bodies and of the medium transmitting the sound; the physical characteristics of tones; the production of tones by different classes of musical instruments including some types of apparatus for the mechanical reproduction of music; the mechanism of the ear for the detection of the characteristics of musical tones; the acoustics of auditoriums. The subjects will be illustrated by physical apparatus and by musical instruments. Some excursions will be made for the best illustrative material.

### *B. Theory*

**\*31, 32** (old number 7, 8) — Harmony. Professor BINGHAM and Mr. HOUGH.  
6 points.

M., W. and F. at 1. 707 J.

Prerequisite, a knowledge of musical notation, an accurate ear, and the ability to play simple chord successions on the piano.

**\*35, 36** (old number 11, 12) — Counterpoint. Professor BINGHAM. 4 points.  
W. and F. at 10. 707 J.

Prerequisite, Course **31, 32**.

**\*131-132** (old number 13-14) — Composition. Professor BINGHAM. 4 points.  
W. and F. at 9. 707 J.

Students are advised, though not required, to take Course **e33-e34** before Course **131-132**.

For a course in advanced harmony students are referred to the extension course Music **e33-e34**.

### *C. Applied music*

**\*65-66** — Ensemble playing. Mr. DITTLER and Mr. HOUGH. 2 points, if taken parallel to a theoretical or historical course in music; no credit if taken for either session separately.

W. at 3. 701 J.

**\*75-76** — Choral singing. Mr. DOERSAM. 2 points, if taken parallel to a theoretical or historical course in music; no credit if taken for either session separately.

Tu., 4-5:30. Barnard Hall.

Other courses given at Columbia University are described in the Announcement of the Department of Music.

## PHILOSOPHY

**A major in Philosophy.** — Students majoring in philosophy will be required to take in Philosophy — Courses 1; 12; 61-62; and other courses to be arranged in consultation with the department.

**Other fields** — Psychology 1 and other courses which will vary with the special interest of the student, and should be arranged in consultation with the major department.

**Honors Course** (see page 57). — The comprehensive examination for students in the honors course assumes: (a) general knowledge of the history of European philosophy and a first-hand acquaintance with the principal writings of one ancient and two modern philosophers; (b) familiarity with the four main types of cosmological theory and a special knowledge of one of them; (c) acquaintance with the facts and theories of general esthetics and familiarity with their special application to one of the arts; (d) some proficiency in the theory and practice of formal logic; (e) knowledge of the history and problems of ethical theory; (f) the equivalent of at least 6 points of psychology and at least 12 points of intensive work in some branch of natural science, social science or literature, such cognate study to be chosen and carried on in consultation with the Department of Philosophy.



**1 (or 2) — Introduction to philosophy.** Professors MONTAGUE and PARKHURST and Mrs. LEAVENWORTH. 3 points.

Winter session: **1a** — M., W. and F. at 10.  
**1b** — Tu., Th. and S. at 9.  
**1c** — Tu., Th. and S. at 10.  
 Spring session: **2a** — M., W. and F. at 9.  
**2b** — Tu., Th. and S. at 9.  
**2c** — Tu., Th. and S. at 10.

**3-4 — Logic, inductive and deductive.** Professor MONTAGUE. 4 points.  
 F. at 11.

A brief survey of the principles of definition and classification, of syllogistic reasoning and of Mill's canons of induction.

**12 — The metaphysics of vitalism and pragmatism.** Professors MONTAGUE and PARKHURST. 3 points.

M., W. and F. at 10.  
 Prerequisite, Course 61.

A study of McDougall, Bergson, James and Schiller.

**21-22 — Ethics, individual and social.** Professors MONTAGUE and PARKHURST and Mrs. LEAVENWORTH. 6 points.

M., W. and F. at 1.

Open to juniors and seniors, and, after consultation with the department, to specially qualified sophomores.

The course will include three distinct lines of inquiry: (1) the history of the traditional philosophic theories of good and evil and the more psychological problems of ethics; (2) the specifically social problems and the ethical ideals implicit in such movements as socialism and feminism, nationalism and democracy; (3) the analysis of ethical situations by the case method; the study of a few modern Utopias.

**41-42 — General esthetics.** Professor PARKHURST. 6 points.

Tu. and Th. at 9.

Open to juniors and seniors and to specially qualified sophomores.

The study of the tragic, the comic, the sublime and the beautiful and a psychological analysis of the origins, interrelations, subject-matter and purpose of the arts, with special emphasis upon the laws of color harmony, rhythm and symmetry as exemplified in the major arts, such as architecture, sculpture, painting and music, and in the minor arts such as dress and interior decoration.

**43-44 — Investigations in esthetics.** Professor PARKHURST. 4 points.

Th. at 10.

Open to students who have taken Course 41-42 or its equivalent.

A treatment of certain general problems, such as rhythm, and of certain specific problems of the particular arts, such as poetic imagery.

**51-52 — Symbolism.** Professor PARKHURST. 4 points.

Tu. at 10.

A study of the use of symbols in art, religion and speech.

**61-62 — The history of philosophy.** Professor MONTAGUE and Mrs. LEAVENWORTH. 6 points.

M., W. and F. at 9.

Open to juniors and seniors, and, after consultation with the department, to specially qualified sophomores.

**66 — Philosophy of religion.** Professor BUSH and assistant. 3 points.  
Tu. and Th. at 11, and a third hour to be arranged.  
Open to juniors and seniors.

**79 — Contemporary philosophy.** Professor PARKHURST. 3 points.  
M., W. and F. at 11.  
Prerequisite, Course 1 or 61-62.

## PHYSICAL EDUCATION

*A physical and medical examination is required of all entering students.*

**A1, A2 — Gymnastics and rhythmic fundamentals.** 2 hours.

M. and W. at 10 (I), at 11 (II), at 2 (III), at 3 (IV).

**And athletics, games, dancing or swimming.** 1 hour.

Hour to be arranged on Tu., Th. or F.

Prescribed for freshmen.

A course in personal hygiene (Hygiene A) is also prescribed for freshmen.

As soon as possible after the medical and physical tests are completed, each freshman will be given a motor ability test. As a result of these three tests, each student will be given a *physical efficiency* rating which will be used as a basis for deciding the type of physical activity the student will enter. A *high physical efficiency rating* will make it possible for a student to *elect* her type of activity after the first year.

A medical and physical examination is required at the end of the spring session.

A student entering as a freshman in February must complete her freshman requirement before beginning Course C.

**B1, B2 — Natural dancing and other activities.** 2-hours.

Tu. and Th. at 10 (I), at 11 (II), at 2 (III), at 3 (IV).

The type of activity offered will vary with the season.

**And athletics, games, dancing or swimming.** 1 hour.

Hour to be arranged on M., W. or F.

Prescribed for sophomores.

**C1, C2 — Athletics, games, dancing, swimming or prescribed work,** to be elected in any authorized activity, depending upon the student's physical condition. Specific work will be prescribed only in special cases. 2 hours.

Hours to be arranged.

Prescribed for juniors.

**D1, D2 — Athletics, games, dancing, and swimming.** Substitution of approved activities will be allowed in special cases. 2 hours.

Hours to be arranged.

Prescribed for seniors.

Students wishing to qualify as camp councillors or social workers are urged to choose their electives accordingly.

The Red Cross Life Saving Course and tests will be given each session and may be counted as a regular elective for juniors and seniors.



**101, 102 — Graded gymnastics, dancing, organized games, and swimming** for women graduate students under the Faculties of Philosophy, Political Science and Pure Science, and women students in the professional schools of the University. 3 hours. 2 points.

All regular sections are open provided the registration is not already filled by undergraduate students.

The prescribed gymnasium and field costume consists of dark blue bloomers, special blouses trimmed with class colors, a sleeveless jersey, black tie, and high white tennis shoes. Approximate cost, \$10. Swimming suits, \$1.25. For further information inquire at Room 209, Barnard Hall.

## PHYSICS

**A major in Physics.** — Students majoring in physics will be required to take in

**Physics** — Courses to be arranged in consultation with the department.

**Other fields** — Mathematics: analytics, differential and integral calculus, and if possible differential equations.

**Chemistry** — 1 year's work.

A reading knowledge of French and German by the beginning of the junior year.

A course in another natural science.

**Honors Course** (see page 57). — The comprehensive examination assumes, in addition to the requirements for students majoring in physics, that the students have supplemented the ground covered in the announced courses by (a) readings and reports on the theory and wider applications in various fields; (b) readings and reports upon the history of the development of important principles, including some study of the lives of principal contributors to the development of the science; (c) more advanced laboratory experiments in some field; (d) the independent solution of some theoretical or experimental problem in the field of major interest.

**11-12 — General physics.** Professors MALTBY and LANGFORD and Miss TOWNSEND. 8 points.

M., W. and F. at 11 and 2 hours of laboratory work, Tu., 9-12; Th., 9-12; M. 1-4; and other afternoon hours to be arranged. Pre-medical students are required to take 3 hours of laboratory work, 9 points.

Open to all students.

Prerequisite or parallel, Math. 1, 22 or 7-8.

**31 — Mechanics.** Professor LANGFORD. 4 or 5 points.

M., W. and F. at 9 (or hours to be arranged) and 2 or 4 hours of laboratory work.

Prerequisite, Course 11-12, except by special arrangement.

**32 — Heat and properties of matter.** Professor LANGFORD. 4 or 5 points.

M., W. and F. at 9 (or hours to be arranged) and 2 or 4 hours of laboratory work.

Prerequisite, Course 31, except by special arrangement.

**33 — Sound.** Professor MALTBY. 4 points.

Hours to be arranged for 3 lectures or discussions and 2 hours of laboratory work.

Prerequisite, Course 11-12.

[**34 — Light.** Professor LANGFORD. 4 or 5 points.

Prerequisite, Course 11-12.

*Not given in 1929-30.]*

**35 — Electricity and magnetism.** Professor LANGFORD. 4 or 5 points.  
M., W. and F. at 1 and 2 or 4 hours of laboratory work.  
Prerequisite, Courses 31 and 32, except by special arrangement.

**36 — Electricity.** Professor LANGFORD. 4 or 5 points.  
M., W. and F. at 1 and 2 or 4 hours of laboratory work.  
Prerequisite, Course 35.

**37, 38 — Supplementary laboratory work** in mechanics, heat, light, or electricity to meet the needs of individual students may be arranged in consultation with the instructor. Professor LANGFORD.  
Hours and credit by arrangement.

**137 — History of the development of some fundamental theories in physics.** Professor MALTBY. Readings, reports and discussions. 3 points.  
Hours to be arranged.  
Prerequisite, some of the advanced courses in physics.

This course is designed to give the students a more comprehensive view of the development of certain fundamental theories, of the experiments which have been crucial, and the bearing of experimental evidence from various fields of physics upon these theories.

**138 — Theory of electricity.** Professor MALTBY. Readings, reports and discussions. 3 points.  
Hours to be arranged.  
Prerequisite, Courses 35, 36.

## PSYCHOLOGY

*A major in Psychology will satisfy the requirement in Group II. Students majoring in this subject must satisfy the 14-point requirement in Group III in subjects other than psychology. For other students, beginning with the Class of 1932, courses in psychology will count toward the requirement in the group indicated by the numerals printed after the point value for each course.*

**A major in Psychology.** — Students majoring in psychology will be required to take in

**Psychology** — the following 24 points, Courses 1; 7-8; 19, 20; 21, 22; 25 and the 4 other points with advice of the department.

**Other fields** — the following definite courses: 1 year in philosophy (6 points); 1 year (8 points) fundamental course, with laboratory, in either zoölogy, chemistry, physics or botany.

Certain other work in social sciences, languages, literature, mathematics, fine arts or education, which will vary with the special interest of the student and should be arranged in consultation with the major department.

**Honors Course** (see page 57). — The comprehensive examination for students in the honors course assumes: (a) knowledge of systematic, experimental, comparative, developmental, abnormal and physiological psychology; (b) special familiarity with experimental techniques, methods of mental measurement, and some field of psychotechnic application; (c) first-hand acquaintance with the history, literature and current status of some particular problem, and an original effort to investigate some question relating thereto; (d) collateral knowledge of

1. Two related fields, — as zoölogy, physiology, philosophy, sociology, education, anthropology.
2. The French and the German languages, and statistical methods, in so far as these are implied by the foregoing requirements.



**1 (or 2) — Introduction to psychology.** Professors HOLLINGWORTH and GATES and Dr. JERSILD. 3 points in Group III.

Winter session: **1a** — M., W. and F. at 9.

**1b** — M., W. and F. at 10.

**1c** — Tu., Th. and S. at 9.

**1d** — Tu., Th. and S. at 10.

Spring session: **2a** — M., W. and F. at 9.

**2b** — M., W. and F. at 10.

**2c** — Tu., Th. and S. at 9.

**2d** — Tu., Th. and S. at 10.

An introduction to the chief facts, principles and problems of normal adult psychology, through systematic study of a text, lectures, exercises and reading in special fields. This course is a prerequisite to all other courses in psychology and in education.

**Educational psychology.** Professors HOLLINGWORTH and GATES and Dr. JERSILD. 3 points either session. See Education 07A or 08A (page 90).

**7-8 — Experimental psychology.** Professor HOLLINGWORTH and assistants. 8 points in Group II.

Tu. and Th. at 11 and 4 hours of laboratory work on M., 2-4; Tu., 9-11, 2-4; W., 10-12, 1-3; Th., 9-11, 2-4; F., 1-3. Two laboratory periods on non-consecutive days. No section given for less than six students. Not more than fourteen in one section.

Prerequisite, Course 1.

The course presents the chief problems, methods and results of experimental psychology. Each student conducts a series of typical individual experiments, participates in certain group experiments, prepares systematic reports of results and becomes familiar with the literature of experimental psychology.

**[19 — Developmental psychology.** Professor HOLLINGWORTH. 3 points in Group II.

Prerequisite, Course 1.

A survey of mental origins, of the developmental stages of human life through infancy, childhood, youth, maturity and old age, with special reference to biological, psychological and social factors in individual growth and adjustment. Reading, questions, reports and discussion.

*Not given in 1929-30.]*

**20 — Abnormal psychology.** Professor HOLLINGWORTH. 3 points in Group II.

Tu. and Th. at 9.

Prerequisite, Course 7 or 19 or 119.

A general survey of the field of psychopathology, the history of the subject, the more common forms of mental inadequacy and disturbance, and their psychological interpretation, including the principles of mental hygiene and psychotherapy. Lectures, reading, lantern slides and case studies.

**[21 — Applications of psychology.** Professor GATES. 2 points in Group III.

Prerequisite, Course 1.

A survey of the applications of psychology in daily life and in practical fields, with special attention to methods of mental measurement.

*Not given in 1929-30.]*

*So be given in 1929-30*

**22 — Comparative psychology.** Professor GATES. 2 points in Group III.

Th., 2-4.

Prerequisite, Course 1.

A survey of the psychology of animal behavior.

**25 — Social psychology.** Dr. JERSILD. 3 points in Group III.

M., W. and F. at 10.

Prerequisite, Course 1.

Studies of the psychology of social relations, institutions, conventions, of native and acquired forms of social behavior, analysis of differences in groups as determined by sex, race and environment. Lectures, reports and discussions.

**118 — Psychology of feeling and emotion.** Dr. JERSILD. 3 points in Group III.

M., W. and F. at 10.

Prerequisite, at least 6 points in psychology.

Lectures, reading and reports on the nature, function and physiological basis of feeling and emotion in human and animal life, and the rôle of affective processes in such fields as social adjustment, mental hygiene, the fine arts, religion.

*Special courses by the visiting lecturer, Dr. Charlotte Bühler.*

**119 — Psychology of childhood.** Dr. BÜHLER. 3 points in Group II.

Tu. and Th. at 10 and, for Barnard students, occasional conferences to be arranged.

Prerequisite, Course 1.

A survey of mental development through childhood and adolescence, and of the early influences making for balance and adjustment.

**181 — Twentieth century psychology in Europe.** Dr. BÜHLER. 3 points in Group III.

W., 3-5.

Open to juniors and seniors; advised for psychology majors.

Informal lectures and discussions concerning the most important movements and personalities in the development of psychology in Europe since 1900.

## RELIGION

**1, 2 — The Bible.** Chaplain KNOX. 4 points.

Tu. and Th. at 11.

Course 2 is a continuation of Course 1, but either course may be taken separately.

A thorough study of the Bible in the light of modern scholarship. Class-room exercises will follow a printed syllabus.

Winter session: How the Old Testament was written, the stories of Genesis, their origin and meaning, the decalogue and other ancient codes, the lives and teachings of the prophets; the growth of religious ideas and ethical standards throughout Biblical history.

Spring session: The books of Job, Jonah and Daniel of the Old Testament, and the study of the New Testament; how the Gospels were written and their content; also the letters of Paul and the Book of Revelation.

**3, 4 — A study of religions.** Professor FRIESS. 4 or, with the permission of the instructor, 6 points.

Tu. and Th. at 2.

Open to all excepting freshmen.

Selections from the world's sacred writings, religious practices, art, and ideas interpreted so as to throw light upon the nature and functions of religion in human experience. Selections in the winter session will be drawn principally from Far Eastern religions; in the spring session, from the Western World, ancient, medieval and modern.



## ROMANCE LANGUAGES AND LITERATURES

## French

**A major in French.** — Students with a major in French will be required to take in

**French** — Courses 11, 12; 19, 20; 27, 28 or 29, 30, and other courses to be arranged in consultation with the department.

**Other fields** — Courses which will vary with the special interest of the student and should be arranged in consultation with the major department.

**Honors Course** (see page 57). — The comprehensive examination assumes (a) the ability to use French correctly as a mode of expression both in speaking and in writing; (b) a general knowledge of the history of French literature from its origin to the present day; (c) a more thorough knowledge of a century or period.

Students are also expected to show that they have followed courses in history and philosophy, and that they have a reading knowledge of Italian or Spanish, and a working knowledge of German.

(Note: If need be, a parallel course for honors could be arranged for students wishing to make Spanish their subject of major interest.)

(See also *Introduction to the science of language*, p. 125.)

*Language courses*

**1a-2a** — Elementary course. Miss NOLLET. 3 recitations, 2 hours of practical work. 8 points.

M., Tu., W., Th. and F. at 9.

Phonetics, grammar, reading, conversation.

**1b, 2b** — Reading, composition, syntax, phonetics. Professor PRENEZ and Miss BIÉLER. 6 points.

M., W. and F. at 1 (I); Tu., Th. and S. at 9 (II).

Prerequisite to Course 1b, Course 1a-2a or elementary entrance French.

Prerequisite to Course 2b, Course 1b or intermediate entrance French.

**3, 4** — Modern French prose; review of grammar; phonetics. Misses BIÉLER and NOLLET and Dr. VAILLANT. 6 points.

M., W. and F. at 9 (I), at 10 (II), at 2 (III); Tu., Th. and S. at 9 (IV), at 10 (V).

Prerequisite, Course 2a with a grade of at least B or Course 2b or intermediate entrance French.

**5, 6** — Practical phonetics applied to French. Professor LOISEAUX. 2 hours. 2 points.

M. and W. at 2.

Prerequisite, Course 2b or any higher course. This course is divisible only for students who are taking another French course.

In Course 6, a series of conferences will be arranged for seniors who intend to teach French.

**7, 8** — Intermediate French composition. Professors LEDUC and PRENEZ, Miss BIÉLER and Dr. VAILLANT. 4 points.

M. and W. at 9 (I), at 10 (II); Tu. and Th. at 10 (III), at 11 (IV).

Prerequisite, Course 2b with a grade of A, or Course 3, 4 or intermediate entrance French.

Review of French syntax; study of prose construction; dictation and conversation.

**9, 10 — Advanced French composition.**<sup>1</sup> Professor LEDUC. 4 points.

Tu. and Th. at 3.

Open to students only after consultation with the instructor. Limited to 20 students.

Intended for students with a fair knowledge of French who desire further practice in descriptive and narrative writing, oral composition, and the rendering of English texts into French.

**9a, 10a — Advanced conversation.**<sup>1</sup> Miss NOLLET. 2 points.

Th. at 1.

Open to students only after consultation with the instructor. Limited to 15 students. Divisible only for students who are taking another French course.

Discussion and reports on assigned readings.

#### *Literature courses*

Students are reminded that the ability to use French both in speaking and writing is considered a general requirement for all literature courses.

**11, 12 — General introduction to the study of French literature.** Professors LEDUC and PRENEZ, Miss BIÉLER and Dr. VAILLANT. 6 points.

M., W. and F. at 9 (I), at 10 (II), at 1 (III); Tu., Th. and S. at 10 (IV).

Prerequisite, Course **3, 4** or a high rating in intermediate entrance French or its equivalent.

A survey of French literature, including the reading of at least one work from each leading author from the seventeenth century to the present time. Reading, composition, lectures.

#### GROUP A

*Prerequisite, Course 11, 12 or its equivalent, excepting for Course 13, 14.*

**13, 14 — Outlines of French history.**<sup>1</sup> Professor LOISEAUX. 2 points.

F. at 11.

Prerequisite, Course **3, 4** or its equivalent. Divisible only for students who are taking another French course.

A survey of the important events of French history with special emphasis on their relation to literature.

**15, 16 — French literature in the nineteenth century to 1870.**<sup>1</sup> ~~Dr. VAILLANT.~~  
6 points.

M., W. and F. at 10.

Development of lyric poetry, the novel and the theatre during the romantic movement.

**17, 18. — French literature from 1870 to the present day.**<sup>1</sup> Professor PRENEZ. 6 points.

M., W. and F. at 11.

A study of the various tendencies and literary developments which occurred during the latter part of the nineteenth century and the beginning of the present century.

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<sup>1</sup> Conducted entirely in French.



**19, 20 — French literature in the seventeenth century.**<sup>1</sup> Professor LOISEAUX.  
6 points.

M., W. and F. at 10.

The political, social and artistic life of the country as expressed in the works of the great writers of the classical period.

**[21, 22 — History of the French novel.**<sup>1</sup> Professor LEDUC. 6 points.  
*Not given in 1929-30.]*

**23, 24 — History of the French drama.**<sup>1</sup> Professor MULLER. 6 points.  
M., W. and F. at 2.

General survey of the development of the French drama from its origin to the present time; the most representative plays of the different periods.

## GROUP B

*Prerequisite, 6 points of Group A except by special permission.*

**25, 26 — Development of French lyric poetry.**<sup>1</sup> Professor PRENEZ. 4 or 6 points.  
Tu. and Th. at 11.

Lyric poetry in France from the origins to the present day. Study of French verse and its evolution. The various schools of poetry; their history, influence and decline.

**29, 30 — French literature in the sixteenth century.**<sup>1</sup> Professor LEDUC. 4 or 6 points.  
Tu. and Th. at 2.

The literature of the sixteenth century with readings from Rabelais, Ronsard, Montaigne, etc.; the development of humanism and foreign influences.

**31, 32 — History of French civilization.**<sup>1</sup> Professor LOISEAUX. 4 points.  
M. and W. at 11.  
Open to students only after consultation with the instructor.

General survey of the development of French civilization from the Roman conquest to the present day; the political, artistic, literary and scientific activities of the French people in the formation of their national life, and their contribution to human progress.

**\*113, 114 — French literature in the eighteenth century.**<sup>1</sup> Professor LOISEAUX.  
6 points.

M. and W. at 3.

Prerequisite, Course 19, 20.

The spirit of the eighteenth century and its influence on the French Revolution and modern thought will be studied in the lives and works of Montesquieu, Voltaire, Rousseau, the Encyclopedists and the minor writers.

Other courses given at Columbia University are described in the Announcement of the Division of Modern Languages and Literatures.

<sup>1</sup> Conducted entirely in French.

## Italian

**A major in Italian.** — Students majoring in Italian will be required to take in

**Italian.** — Courses 1b, 2b; 13, 14; 101-102; 105-106 and another course to be arranged in consultation with the department.

**Other fields.** — Courses will vary with the special interest of the student and must be arranged in consultation with the major department.

**Honors Course** (see page 57). The comprehensive examination assumes (a) the ability to speak and write Italian with facility; (b) a general knowledge of Italian literature from its origin to the present day; (c) a more thorough knowledge of some particular century or period; (d) some familiarity with the development of Italian political, economic and social institutions and with Italian art.

*Language courses*

**1a-2a — Elementary course.** Professor RICCIO. 6 points.

M., W. and F. at 9.

Grammar, reading, composition and oral drill.

This course may not be taken at the same time as Spanish 1a-2a.

**1b, 2b — Advanced Course.** Professor RICCIO. 6 points.

Tu., Th. and S. at 9.

Prerequisite, Course 1a-2a or elementary entrance Italian; recommended as parallel, Course 11-12.

A rapid review of grammar and syntax. The reading of representative works by Italian authors; also composition and conversation.

**11-12 — Italian conversation.** Professor RICCIO. 1 point if taken for the winter and the spring sessions; no credit if taken for either session separately.

Th. at 1.

Prerequisite, Course 1a-2a or its equivalent; recommended as a parallel to Course 1b, 2b.

*Literature courses*

**13, 14 — Modern Italian literature.**<sup>1</sup> Professor BIGONGIARI. 6 points.

M. and W. at 2 and fortnightly conferences.

Prerequisite, Course 1b, 2b.

Reading and discussions of the most significant works of the nineteenth century and contemporary Italy.

**\*101-102 — Italian literature from the thirteenth to the sixteenth century.**<sup>1</sup>

Professor BIGONGIARI. 6 points.

M. and W. at 3.

Open to students only after consultation with the instructor.

The thirteenth century religious, philosophical and scientific movements in connection with Dante; humanism from Petrarch to Ficino; philosophical and scientific renaissance from Leonardo to Galileo; the Reformation and the Counter-Reformation.

**\*105-106 — Survey of Italian literature from beginnings to 1900.** Professor RICCIO. 6 points.

S., 11-12:40.

Open to students only after consultation with the instructor.

This course aims to bring out, through a study of the most significant works, the chief characteristics of the various epochs of Italian literature, the evolution of Italian thought and literary ideals. Designed also for students wishing to study the cross-currents between Italian and other Romance literatures. Readings and discussions.

Other courses given at Columbia University are described in the Announcement of the Division of Modern Languages and Literatures.

<sup>1</sup> Conducted entirely in Italian.



## Spanish

**A major in Spanish.** — Students majoring in Spanish will be required to take in

Spanish — Courses 1b, 2b; 7, 8; 13, 14; 21-22; 17-18, and either 19, 20 or a more advanced course to be chosen in consultation with the department.

**Other fields** — Courses will vary with the special interest of the student and should be arranged in consultation with the major department.

*Language courses*

**1a-2a — Elementary course.** Miss RODRIGUEZ-CASTELLANO and ———. 6 points.

M., W. and F. at 9 (I), at 11 (II).

Grammar, reading, composition.

This course may not be taken at the same time as Italian 1a-2a.

**1b, 2b — Advanced course.** Miss RODRIGUEZ-CASTELLANO. 6 points.

M., W. and F. at 11 (I), at 1 (II).

Prerequisite, Course 1a-2a.

A rapid review of grammar and syntax, the reading of typical works by modern authors; also composition and conversation.

**7, 8 — Spanish composition.** Miss RODRIGUEZ-CASTELLANO. 4 points.

Tu. and Th. at 9. *Sec. I; M + W at 9 Sec. II*

Prerequisite, Course 1b.

**[11-12 — Spanish conversation.** Miss RODRIGUEZ-CASTELLANO. 1 point if taken for the winter and the spring sessions; no credit if taken for either session separately.

Prerequisite, Course 1a-2a or 1b, 2b.

*Not given in 1929-30.]*

*Literature courses*

**13, 14 — Practical course and introduction to Spanish literature.**<sup>1</sup> Professor MARCIAL-DORADO. 6 points.

M., W. and F. at 10.

Prerequisite, Course 1b, 2b.

Lectures on the history of Spanish literature and reading of selected works by representative authors, particularly Cervantes, Lope de Vega and Calderón; discussions and reports.

**15-16 — The Spanish drama of the Golden Age.**<sup>1</sup> Miss RODRIGUEZ-CASTELLANO. 4 points.

Tu. and Th. at 11.

Prerequisite, Course 13, 14.

General survey of the development of the Spanish drama from its origin to the present time; reading and discussion of representative plays.

**17-18 — History of Spanish literature in the nineteenth century.**<sup>1</sup> Miss RODRIGUEZ-CASTELLANO. 4 points.

Tu. and Th. at 10.

Prerequisite, Course 13, 14.

Winter session: The romantic movement and lyric poetry. Spring session: Development of the novel.

<sup>1</sup> Conducted entirely in Spanish.

**19, 20 — Spanish civilization.**<sup>1</sup> Professor MARCIAL-DORADO. 4 points.

W. and F. at 9.

Prerequisite, Course **13, 14** or the permission of the instructor.

A survey of the historical development of Spanish civilization and its significance in the life of the world to-day; the various aspects of Spanish culture — literary, artistic, political and economic.

**21-22 — Contemporary movements in Spanish literature.**<sup>1</sup> Professor MARCIAL-DORADO. 4 points.

M. at 9 and a second hour to be arranged.

Prerequisite, Course **13, 14**.

Other courses given at Columbia University are described in the Announcement of the Division of Modern Languages and Literatures.

2 3-

2 4-

*Miss Amelia Agostini*  
*Dorado*

*del Rio*

RUSSIAN. See Slavonic Languages.

### SCIENCE OF LANGUAGE

**1, 2 — Introduction to the science of language.** Professor GRAY. 4 points.

Tu. and Th. at 2. 308 Philosophy.

Open to all excepting freshmen.

This course cannot count toward the major in any language.

Winter session: The nature and universal principles of language, its physiological and psychological foundations, and its relations to the various phenomena of human civilization; classification, distribution and characteristics of the types of language.

Spring session: Survey of the Indo-European languages; sound-changes and sound-laws; outlines of inflexion and syntax; development of the meaning of words.

The entire course is designed to give students in classics, modern languages, and English a general scientific knowledge of the principles common to all languages, particularly as found in the Indo-European group, and thus to aid them in gaining a better understanding of the languages in which they are specializing.

### SLAVONIC LANGUAGES

#### Russian

**\*113, 114 — The Russian novelists.** Professor MANNING. 6 points.

M. and W. at 3.

Open to specially qualified seniors. A knowledge of Russian is not required.

A study of the works of Turgenev, Tolstoy and Dostoyevsky with special reference to their ideas, their artistic methods and their influence on Russia.

Other courses given at Columbia University are described in the Announcement of the Division of Modern Languages and Literatures; courses in the Russian language are described in the Announcement of University Extension.

SOCIOLOGY. See Economics and Social Science.

SPANISH. See Romance Languages and Literatures.

<sup>1</sup> Conducted entirely in Spanish.



## ZOÖLOGY

**A major in Zoölogy.** — Students majoring in zoölogy will be required to take in

**Zoölogy** — Course 1-2, and other courses in combination or sequence which will vary with the individual interest and purpose of the student and should be arranged in consultation with the department.

**Other fields.** — The work will vary with the special interest of the student and should be arranged in consultation with the major department.

**1-2 — General biology and general zoölogy.** Elementary course. Professors CRAMPTON, GREGORY and LOWTHER, Misses HOOK, TEWINKEL and WILD. 8 points.

Tu. and Th. at 2 and 4 hours of laboratory work, Tu. and Th., 3-5, or Tu. and Th., 9-12, or W. and F., 1-4.

**5-6 — Heredity and evolution.** Professor CRAMPTON. 4 points.

M. and W. at 3.

Prerequisite, Course 1-2.

**13 — Histology and histological methods.** Mrs. FORBES. 5 points.

M. and W. at 1 and 6 hours of conferences and laboratory work, M., W. and F., 2-5.

Prerequisite, Course 1-2.

**14 — Embryology and embryological methods.** Mrs. FORBES. 2, 3 or 5 points, according to amount of work to be arranged with the department before registration.

M. and W. at 1 and a maximum of 6 hours of conferences and laboratory work, M., W. and F., 2-5.

Prerequisite, Course 1-2.

**97-98 — Comparative morphology and physiology of vertebrates.** Professors GREGORY and LOWTHER and Miss HOOK. 10 points.

W. and F. at 10, and 6 hours of laboratory work, Tu., 2-5; Th., 1-4.

Prerequisite, Course 1-2 and Chemistry 5-6.

Practical course in dissection and experimentation, with special reference to the mammalia. Recommended for pre-medical students and technicians.

**101, 102 — General zoölogy.** Advanced course. Professors CRAMPTON and LOWTHER. 12 points.

M., W. and F., 1-4, for lectures and 6 hours of laboratory work.

Prerequisite to Course 101, Course 1-2. Prerequisite to Course 102, Course 1-2 and 14, the latter of which may be taken concurrently.

Winter session: invertebrates. Spring session: vertebrates.

**151, 152 — Advanced general and mammalian physiology.** Professor GREGORY and Mrs. FORBES. 8 points.

Tu. and Th., 9-12, for lectures and 4 hours of demonstration and laboratory work.

Open to juniors and seniors.

Prerequisite, Course 1-2, or its equivalent, and organic chemistry.

General principles of animal physiology.





# SCHEME OF

Hours	MONDAY	TUESDAY	WEDNESDAY
A.M.	Chemistry 41-42 Economics 1-2 (I) English C2 (I) English 37, 38 English 53, 54 French 1a-2a French 3, 4, (I) French 7, 8 (I) French 11, 12 (I) Geology 27, 28 German 1-2 (I) History 1-2 (I) Italian 1a-2a Latin 3, 12r Latin 21, 22 Mathematics 31-32 Philosophy 2a Philosophy 61-62 Physics 31, 32 Psychology 1a (or 2a) Spanish 1a-2a (I) Spanish 21-22	Botany 53-54 Economics 25-26 English C2 (III) English C5 (II) English 61, 62 English 77, 78 French 1a-2a French 1b, 2b (II) French 3, 4 (IV) Geography 1, 2 German 1-2 (V) Government 7 History 1-2 (III) Italian 1b, 2b Latin 11, 12 (II) Latin 27, 28 Mathematics 7-8 (III) Philosophy 1b (or 2b) Philosophy 41-42 Psychology 1c (or 2c) Psychology 20 Spanish 7, 8 Zoölogy 151, 152	Chemistry 41-42 Economics 1-2 (I) English 37, 38 English 53, 54 French 1a-2a French 3, 4 (I) French 7, 8 (I) French 11, 12 (I) Geology 27, 28 German 1-2 (I) History 1-2 (I) Italian 1a-2a Latin 3, 12r Latin 21, 22 Mathematics 31-32 *Music 131-132 Philosophy 2a Philosophy 61-62 Physics 31, 32 Psychology 1a (or 2a) Spanish 1a-2a (I) Spanish 19, 20
9	Chemistry 42a Chemistry 63, 64 Economics 2r-1r Economics 19, 20 †Education B01A, B02A (I) English A1, A2 (1a, b, c) English A2r English 67, 68 French 3, 4 (II) French 7, 8 (II) French 11, 12 (II) French 15, 16 French 19, 20 Geology 15-16 German 3, 4 (I) German 7, 8 Greek 11, 12 History 51, 52 Mathematics 7-8 (I) *Music 5, 6 Philosophy 1a Philosophy 12 Psychology 1b (or 2b) Psychology 25 Psychology 118 Spanish 13, 14	Chemistry 5-6 Economics 17, 18 English C2 (IV) English C5 (III) English 3, 4 English 39-40 English 69, 70 English 71, 72 French 3, 4 (V) French 7, 8 (III) French 11, 12 (IV) Geology 2r-1r German 3, 4 (III) German 9, 10 History 1-2 (IV) *History 105, 106 Latin 35-36 Mathematics 21r Mathematics 32r-31r Mathematics 34r Philosophy 1c (or 2c) Philosophy 51-52 Psychology 1d (or 2d) Psychology 119 *Public Law 103, 104 Spanish 17-18 Sociology 15, 16 Zoölogy 151, 152	Chemistry 42a Chemistry 63, 64 Economics 2r-1r Economics 19, 20 †Education B01A, B02A (I) English A1, A2 (1a, b, c) English A2r English 67, 68 French 3, 4 (II) French 7, 8 (II) French 11, 12 (II) French 15, 16 French 19, 20 Geology 15-16 German 3, 4 (I) German 7, 8 Greek 11, 12 History 51, 52 Mathematics 7-8 (I) *Music 5, 6 *Music 35, 36 Philosophy 1a Philosophy 12 Psychology 1b (or 2b) Psychology 25 Psychology 118 Spanish 13, 14 Zoölogy 97-98
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Courses marked with an asterisk [\*] are given at Columbia University;

# ATTENDANCE

Hours	THURSDAY	FRIDAY	SATURDAY
A.M.	Botany 53-54 Economics 25-26 English C2 (III) English C5 (II) English 61, 62 English 77, 78 French 1a-2a French 1b, 2b (II) French 3, 4 (IV) Geography 1, 2 German 1-2 (V) Government 7 History 1-2 (III) Italian 1b, 2b Latin 11, 12 (II) Latin 27, 28 Mathematics 7-8 (III) Philosophy 1b (or 2b) Philosophy 41-42 Psychology 1c (or 2c) Psychology 20 Spanish 7, 8 Zoology 151, 152	Chemistry 41-42 Economics 1-2 (I) English C2 (I) English 53 French 1a-2a French 3, 4 (I) French 11, 12 (I) Geology 27, 28 German 1-2 (I) History 1-2 (I) Italian 1a-2a Latin 3, 12r Latin 21, 22 Mathematics 31-32 *Music 131-132 Philosophy 2a Philosophy 61-62 Physics 31, 32 Psychology 1a (or 2a) Spanish 1a-2a (I) Spanish 19, 20	French 1b, 2b (II) French 3, 4, (IV) German 1-2 (V) History 1-2 (III) Italian 1b, 2b Latin 11, 12 (II) Mathematics 7-8 (III) Philosophy 1b (or 2b) Psychology 1c (or 2c)
9			
10	Chemistry 5-6 Economics 17, 18 English C2 (IV) English C5 (III) English 3, 4 English 39-40 English 69, 70 English 71, 72 French 3, 4 (V) French 7, 8 (III) French 11, 12 (IV) Geology 2r-1r German 3, 4 (III) German 9, 10 History 1-2 (IV) *History 105, 106 Mathematics 21r Mathematics 32r-31r Mathematics 34r Philosophy 1c (or 2c) Philosophy 43-44 Psychology 1d (or 2d) Psychology 119 *Public Law 103, 104 Sociology 15, 16 Spanish 17-18 Zoology 151, 152	Chemistry 42a Chemistry 63, 64 Economics 2r-1r Economics 19, 20 †Education B01A, B02A (I) English A1, A2 (1a, b, c) English A2r French 3, 4 (II) French 11, 12 (II) French 15, 16 French 19, 20 German 3, 4 (I) German 7, 8 Greek 11, 12 History 51, 52 Mathematics 7-8 (I) *Music 35, 36 Philosophy 1a Philosophy 12 Psychology 1b (or 2b) Psychology 25 Psychology 118 Spanish 13, 14 Zoology 97-98	Chemistry 5-6 French 3, 4 (V) French 11, 12 (IV) German 3, 4 (III) History 1-2 (IV) Mathematics 21r Mathematics 32r-31r Mathematics 34r Philosophy 1c (or 2c) Psychology 1d (or 2d)
11	Botany 153, 154 Classical Civilization 55, 56 Economics 13, 14 English A1, A2 (III a, b, c) English 41, 42 English 51, 52 English 73, 74 Fine Arts, 37, 38 French 7, 8 (IV) French 25, 26 Geology 1-2 German 25, 26 Government 3, 4 *Government 143, 144 Greek 25, 26 History 84 Hygiene A2 (II) Mathematics 23 Mathematics 46 *Music 1-2 Philosophy 66 Psychology 7-8 Religion 1, 2 Spanish 15-16 Zoology 151, 152	Anthropology 109, 110 Economics 1, 2 (III) Economics 23, 24 English C5 (I) English 23-24 French 13, 14 French 17, 18 German 1-2 (II) German 5, 6 Greek 21, 22 History 1-2 (II) History 9, 10 Mathematics 1 (I) Mathematics 22 (I) Mathematics 135, 136 Philosophy 3-4 Philosophy 79 Physics 11-12 Sociology 1-2 Spanish 1a-2a (II) Spanish 1b, 2b (I)	English A1, A2 (IIIa, b, c) *Italian 105-106 (11-12:40) Mathematics 23 Mathematics 46

those marked with a dagger [†] are given at Teachers College.



# SCHEME OF

Hours	MONDAY	TUESDAY	WEDNESDAY
P.M.	Anthropology 1, 2 Botany 151-152 Chemistry 106 Chemistry 145 Classical Civilization 52 †Education B01A, B02A (II) †Education 07A English 21-22 English 57, 58 French 1b, 2b (I) French 11, 12 (III) German 1-2 (III) German 3, 4 (II) German 28 German 31 Government 1, 2 History 15, 16 Hygiene A2 (I) Latin 11, 12 (I) *Music 31, 32 Philosophy 21-22 Physics 35, 36 Spanish 1b, 2b (II) Zoology 13, 14 Zoology 101, 102		Anthropology 1, 2 Chemistry 106 Chemistry 145 Classical Civilization 52 †Education B01A, B02A (II) †Education 07A English 21-22 English 57, 58 French 1b, 2b (I) French 11, 12 (III) German 1-2 (III) German 3, 4 (II) German 28 German 31 Government 1, 2 History 15, 16 Hygiene A2 (I) Latin 11, 12 (I) *Music 31, 32 Philosophy 21-22 Physics 35, 36 Spanish 1b, 2b (II) Zoology 13, 14 Zoology 101, 102
1.10			
2.10	Economics 1-2 (II) Economics 21, 22 †Education 08A †Education 35A-36A English A1, A2 (IIa, b, c) English C2 (II) English 2 English 59, 60 English 63, 64 English 91, 92 (I) Fine Arts 29, 30 *Fine Arts 103, 104 French 3, 4 (III) French 5, 6 French 23, 24 German 1-2 (IV) German 17, 18 Government 11 Greek 1-2 History 19, 20 Italian 13, 14 Latin 1-2 Mathematics 1 (II) Mathematics 2r Mathematics 7-8 (II) Mathematics 22 (II) Mathematics 27 Zoology 101, 102	Anthropology 6 Classical Civilization 53, 54 English A7, A8 English 35, 36 English 65, 66 English 91, 92 (II) Fine Arts 27, 28 *Fine Arts 150 French 29, 30 Greek 1-2 History 11, 12 *History 149, 150 Hygiene A1 (II) Latin 1-2 *Music 11-12 *Public Law 156 *Public Law 161 Religion 3, 4 Science of Language 1, 2 Zoology 1-2	Economics 1-2 (II) Economics 21, 22 †Education 08A †Education 35A-36A English A1, A2 (IIa, b, c) English 2 English 59, 60 English 63, 64 Fine Arts 29, 30 French 3, 4 (III) French 5, 6 French 23, 24 German 1-2 (IV) Government 11 Greek 1-2 History 19, 20 Italian 13, 14 Latin 1-2 Mathematics 1 (II) Mathematics 2r Mathematics 7-8 (II) Mathematics 22 (II) Mathematics 27 Zoology 101, 102
3.10	English 15, 16 English 91, 92 (I) *Fine Arts 149 *French 113, 114 *Italian 101-102 Latin 19-20 Latin 29-30 Mathematics 6 Mathematics 33 Mathematics 45 Mathematics 56 *Russian 113, 114 Zoology 5-6 Zoology 101, 102	Botany 149 English 91, 92 (II) *Fine Arts 150 French 9, 10 Geology 19, 20 History 126 Latin 37, 38 *Public Law 156 *Public Law 161 Sociology 53, 54	English 15, 16 English 43, 44 *Fine Arts 149 *French 113, 114 *Italian 101-102 Mathematics 6 Mathematics 33 Mathematics 45 Mathematics 56 *Music 65-66 Psychology 181 *Russian 113, 114 Zoology 5-6 Zoology 101, 102
4.10		English 11, 12 (4-5:50) *Fine Arts 183 (4-5:30) *Greek 103, 104 *Music 75-76 (4-5:50)	English 43, 44 Psychology 181 *Public Law 171-172 (4-6)

Courses marked with an asterisk [\*] are given at Columbia University;

## ATTENDANCE

Hours	THURSDAY	FRIDAY	SATURDAY
P.M.	French 9a, 10a Geology 19, 20 German 15-16 Italian 11-12 Latin 37, 38 Sociology 21, 22	Anthropology 1, 2 Botany 151-152 Chemistry 5-6 Chemistry 106 Chemistry 145 Classical Civilization 52 †Education B01A, B02A (II) †Education 07A English 21-22 English 57, 58 French 1b, 2b (I) French 11, 12 (III) German 1-2 (III) German 3, 4 (II) Government 1, 2 History 15, 16 Latin 11, 12 (I) *Music 31, 32 Philosophy 21-22 Physics 35, 36 Spanish 1b, 2b (II) Zoölogy 101, 102	
1.10			
2.10	Anthropology 6 Classical Civilization 53, 54 English A7, A8 English 35, 36 English 65, 66 Fine Arts 27, 28 *Fine Arts 150 French 29, 30 *Government 105-106 Greek 1-2 History 11, 12 *History 149, 150 Hygiene A1 (II) Latin 1-2 *Music 11-12 Psychology 22 Religion 3, 4 Science of Language 1, 2 Sociology 21, 22 Zoölogy 1-2	Economics 1-2 (II) Economics 21, 22 †Education 08A English A1, A2 (IIa, b, c) English C2 (II) English 59, 60 *Fine Arts 103, 104 French 3, 4 (III) French 23, 24 German 1-2 (IV) Government 11 Greek 1-2 Latin 1-2 Mathematics 1 (II) Mathematics 2r Mathematics 7-8 (II) Mathematics 22 (II) Mathematics 27 Zoölogy 101, 102	
3.10	Botany 149 English 28 English 91, 92 (III) *Fine Arts 150 French 9, 10 *Government 105-106 History 126 Latin 9-10 Latin 37, 38 Psychology 22 Sociology 53, 54	*Fine Arts 149 Mathematics 6 Mathematics 33 Mathematics 45 Mathematics 56 Zoölogy 101, 102	
4.10	English 28 English 91, 92 (III) *Fine Arts 183 (4-5:30) *Greek 103, 104		

those marked with a dagger [†] are given at Teachers College.



## ACADEMIC CALENDAR

1929-1930

### 1929

- July 8 — Monday. Thirtieth Summer Session of Columbia University begins.
- Aug. 16 — Friday. Thirtieth Summer Session of Columbia University ends.
- Sept. 7 — Saturday. Last day for filing applications for entrance and deficiency examinations, and for advanced standing. The privilege of later application may be granted on payment of a fee of \$5.
- Sept. 16 — Monday. Entrance examinations and examinations for deficient students begin.
- Sept. 20 — Friday. Registration (including the payment of fees) begins.
- Sept. 24 — Tuesday. Registration ceases for Barnard students previously matriculated.  
The privilege of later registration may be granted on payment of a fee of \$5.
- Sept. 25 — Wednesday. Winter Session, forty-first year, begins.  
Registration ceases for students matriculating for the first time.  
The privilege of later registration may be granted on payment of a fee of \$5.
- Sept. 26 — Thursday. Classes begin.
- Oct. 15 — Tuesday. Stated meeting of University Council.
- Nov. 5 — Tuesday. Election Day, holiday.
- Nov. 26 — Tuesday. Annual Thanksgiving Service in St. Paul's Chapel.
- Nov. 28 — Thursday  
to  
Nov. 30 — Saturday, inclusive. Thanksgiving holidays.
- Dec. 17 — Tuesday. Stated meeting of University Council.
- Dec. 23 — Monday  
to

### 1930

- Jan. 5 — Sunday, inclusive. Christmas holidays.
- Jan. 12 — Sunday. Annual Commemoration Service in St. Paul's Chapel.
- Jan. 22 — Wednesday. Mid-year examinations begin.
- Feb. 4 — Tuesday. Winter Session ends.  
Registration for Barnard students entering the Spring Session.  
The privilege of later registration may be granted on payment of a fee of \$5.
- Feb. 5 — Wednesday. Spring Session begins. Classes begin.
- Feb. 12 — Wednesday. Alumnae Day.
- Feb. 18 — Tuesday. Stated meeting of University Council.
- Feb. 22 — Saturday. Washington's Birthday, holiday.

- Mch. 1 — Saturday. Last day for filing applications for non-competitive scholarships.
- Apr. 15 — Tuesday. Stated meeting of University Council.
- Apr. 17 — Thursday  
to
- Apr. 21 — Monday, inclusive. Easter holidays.
- May 19 — Monday. Final examinations begin.
- May 30 — Friday. Memorial Day, holiday.
- June 1 — Sunday. Baccalaureate service.
- June 3 — Tuesday. Conferring of degrees.
- June 11 — Wednesday. Spring Session ends.
- June 16 — Monday. Examinations of the College Entrance Examination Board begin. The dates for filing applications are contained in a circular issued by the Board, 431 West 117th Street, New York, N. Y.
- July 7 — Monday. Thirty-first Summer Session of Columbia University begins.
- Aug. 15 — Friday. Thirty-first Summer Session of Columbia University ends.
- Sept. 8 — Monday. Last day for filing applications for entrance or deficiency examinations, and for advanced standing. The privilege of later application may be granted on payment of a fee of \$5.
- Sept. 15 — Monday. Entrance examinations and examinations for deficient students begin.
- Sept. 19 — Friday. Registration (including the payment of fees) begins.
- Sept. 23 — Tuesday. Registration ceases for Barnard students previously matriculated.  
The privilege of later registration may be granted on payment of a fee of \$5.
- Sept. 24 — Wednesday. Winter Session, forty-second year, begins.  
Registration ceases for students matriculating for the first time. The privilege of later registration may be granted on payment of a fee of \$5.



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